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ABSTRACT

This first grade environmental education guide is one of a series of guides, K-12, which were developed by teachers to help introduce environmental education into the total curriculum. The guides are supplementary in design; it is the teacher's decision when the concepts, objectives, activities, and resources may best be integrated into the existing classroom curriculum. This guide contains a series of 12 episodes (minilessons), each having a number of suggested in- and out-of-class learning activities. The episodes are built around 12 major environmental concepts that form a framework for each grade or subject area, as well as for the entire K-12 program. Although the same concepts are used throughout the K-12 program, emphasis is placed on different aspects of each concept at different grade levels. The first grade guide focuses on aspects such as planets and seasons, living and nonliving organisms, overpopulation, water uses, and animal adaptation. Each of the 12 concepts is covered in one of the episodes contained in the guide. Further, each episode offers subject area integration, subject area activities, interdisciplinary activities, cognitige and affective behavioral objectives, and suggested references and resource materials useful to teachers and students. (Author/TK)

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ENVIRONMENTAL EDUCATION GUIDE

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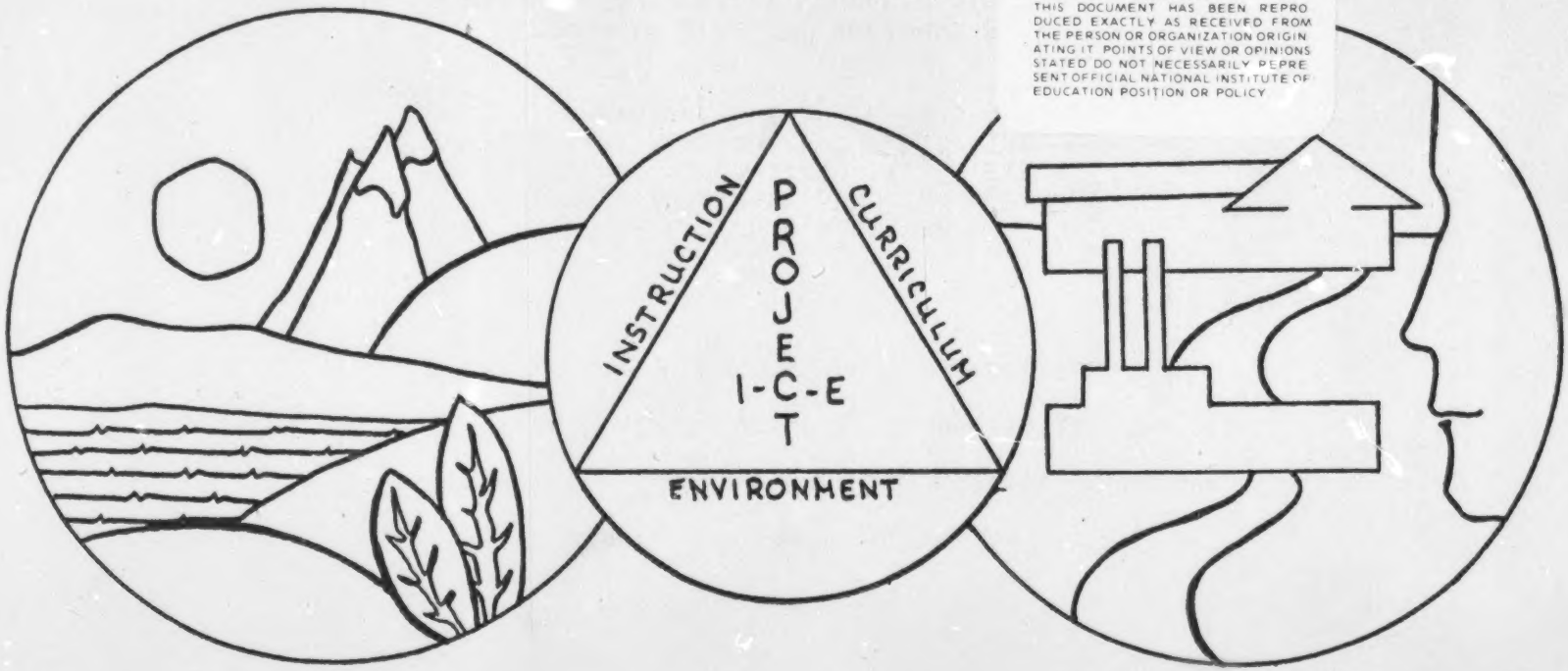

GRADE ONE

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FORWARD TO PROJECT I-C-E ENVIRONMENTAL EDUCATION GUIDES

In 1969, the First Environmental Quality Education Act was proposed in the United States Congress. At the time of the introduction of that legislation, I stated:

"There is a dire need to improve the understanding by Americans of the ominous deterioration of the Nation's environment and the increasing threat of irreversible ecological catastrophe. We must all become stewards for the preservation of life on our resource-deficient planet."

In the three years since the Environmental Education Act was passed by the Congress, much has happened in the United States to reinforce the great need for effective environmental education for the Nation's young people. The intensive concern over adequate energy resources, the continuing degradation of our air and water, and the discussion over the economic costs of the war against pollution have all brought the question of the environmental quality of this nation to a concern not merely of aesthetics but of the survival of the human race.

The intense interest by the public in the quality of our lives as affected by the environment clearly indicates that we cannot just use incentives and prescriptions to industry and other sources of pollution. That is necessary, but not sufficient." The race between education and catastrophe can be won by education if we marshall our resources in a systematic manner and squarely confront the long-term approach to saving our environment through the process of education.

As the incessant conqueror of nature, we must reexamine our place and role. Our world is no longer an endless frontier. We constantly are feeling the backlash from many of our ill-conceived efforts to achieve progress.

Rachel Carson's theme of "reverence for life" is becoming less mystical and of more substance as our eyes are opened to much of the havoc we have wrought under the guise of progress. A strong commitment to an all-embracing program of environmental education will help us to find that new working definition of progress that is a pre-requisite to the continued presence of life on this planet.

- Senator Gaylord Nelson

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PREFACE

PRIMARY TEACHERS!

Here's what you've been looking for!!

Lessons & Activities in all capacities

to INTEGRATE

With ALL subjects.

NO extra planning.

NO extra lessons.

Use daily, whenever, wherever,

the opportunity arises.

Slant this year's teaching

toward ECOLOGY!

Help your class become

AWARE

of their WORLD.

We will need their HELP

in PRESERVING it!

DIRECTIONS FOR USING THIS GUIDE

This guide contains a series of episodes (mini-lesson plans), each containing a number of suggested in and out of class learning activities. The episodes are built around 12 major environmental concepts that form a framework for each grade or subject area, as well as for the entire K-12 program. Further, each episode offers subject area integration, multi-disciplinary activities, where applicable, both cognitive and affective behavioral objectives and suggested reference and resource materials useful to the teacher and students.

1. This I-C-E guide is supplementary in design--it is not a complete course of study, nor is its arrangement sequential. You can teach environmentally within the context of your course of study or units by integrating the many ideas and activities suggested.

2. The suggested learning activities are departures from regular text or curriculum programs, while providing for skill development.

3. You decide when any concepts, objectives, activities and resources can conveniently be included in your unit.

4. All episodes can be adapted, modified, or expanded thereby providing great flexibility for any teaching situation.

5. While each grade level or subject area has its own topic or unit emphasis, inter-grade coordination or subject area articulation to avoid duplication and overlap is highly recommended for any school or district seeking effective implementation.

This total K-12 environmental education series is the product of 235 classroom teachers from Northeastern Wisconsin. They created, used, revised and edited these guides over a period of four years. To this first step in the 1,000 mile journey of human survival, we invite you to take the second step--by using this guide and by adding your own inspirations along the way.

PROJECT I-C-E TWELVE MAJOR ENVIRONMENTAL CONCEPTS

1. The sun is the basic source of energy on earth. Transformation of sun energy to other energy forms (often begun by plant photosynthesis) provides food, fuel and power for life systems and machines.

2. All living organisms interact among themselves and their environment, forming an intricate unit called an ecosystem.

3. Environmental factors are limiting on the numbers of organisms living within their influence. Thus, each ecosystem has a carrying capacity.

4. An adequate supply of clean water is essential to life.

5. An adequate supply of clean air is essential for life.

6. The distribution of natural resources and the interaction of physical environmental factors greatly affect the quality of life.

7. Factors such as facilitating transportation, economic conditions, population growth and increased leisure time influence changes in land use and population densities.

8. Cultural, economic, social, and political factors determine man's values and attitudes toward his environment.

9. Man has the ability to manage, manipulate and change his environment.

10. Short-term economic gains may produce long-term environmental losses.

11. Individual acts, duplicated or compounded, produce significant environmental alterations over time.

12. Each person must exercise stewardship of the earth for the benefit of mankind.

A "Concept Rationale" booklet and a slide/tape program "Man Needs His Environment" are available from the I-C-E RMC to more fully explain these concepts.

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E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental: **Integrated with:**

CONCEPT NO. 1 - Energy **SUBJECT** Science and Art

ORIENTATION How Important Is the Sun's Energy? **TOPIC/UNIT** Plants and Seasons

BEHAVIORAL OBJECTIVES

Cognitive:

Demonstrate at least two effects of the sun on plants and animal growth.

Affective:

Appreciate how much the sun affects us daily by defending it as being the most important factor necessary for plant and animal life.

Skills Used:

1. Plant and observe growth.
2. Keep a pictorial record of weather change.
3. Make a crayon resist with a water-color wash.

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

I. Science
   A. As introduction, ask questions about early morning sun.
      1. What do we see in the morning?
      2. What does it do?
      3. How does it help us?

      Through discussion the children should realize that the sun brings light and warmth to the world.

   B. Demonstration: Two plants and one box are needed. Place in sunlight. Cover one with a box, leave other in direct sunlight. Compare results after 2 days. (Water both plants regularly). Ask: How does the sun affect plants?

   C. Chart: Seeds, and Plants They Become. Save package from seeds and use outer pictures. Also - plant seed in glass jar. On outside of jar, tape seed samples so child sees seed and plant.

(Continued)

Outside or Community:

I. Science
   A. If possible, gain access to a small plot of land and plant a garden in spring, or plant an indoor "garden".

SUGGESTED RESOURCES

Publications:

Books:
Science for Work and Play, Herman & Nina Schneider
Concepts in Science, Brandwein, Cooper, Blackwood, & Hone
The Sun, Our Nearest Star, Franklyn M. Branley, Crowell Co.,1961
The Day We Saw the Sun Come Up, Goudey, Alice C. Schribner, Sons, N. Y. 1961

Audio-Visual:

Films:
Food From the Sun, color, 10 min. (EBF) - BAVI 6742 $4.75
Planting Our Garden, color, 11 min. Coronet, BAVI 0515 $4.00
Filmstrips:
Sun Up (Weston Woods Story Films)
The Sun's Family
Flannel Board
Seasons by Instructo

Community:

CONTINUED OR ADDED LEARNING ACTIVITIES

CLASSROOM (Continued)

I. D. Experiment
Put 2 jars with an equal amount of water in the sun. Cover one of the jars. After a few days ask the children questions about: What happened to the water in the uncovered jar? Use the term evaporation.

E. Discuss how eating fruit gives us energy from the sun.
1. How does eating fruit give us energy?
2. Does this energy come from the sun?
3. How do you know if it does or doesn't?

F. Place hand in direct sunlight and another in shade. Compare difference in temperature.

G. Sun's rays create change. Place colored paper in sunlight. (Will fade.) What happens when you're out in sun. (Sunburn.)

II. Art
A. Draw seasonal picture with heavy crayon; use wash appropriate for season. Example:
white - winter
yellow - summer
orange - fall
blue - spring

B. Paper doll figures or flannel board. Dress with different clothes on rainy, sunny, and cold days. What different activities do you do when weather changes.

(Continued)

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications:	CLASSROOM (Continued) II. C. Weather calendar: keep track of the weather for the month. Enumerate days of similar weather. D. Pin leaves to construction paper or hold down with small rocks, and place in bright sunlight. Let leaves remain in sun for an hour or longer. Remove leaves and find outlines on the paper. This is a very simple project to use in the concept introduced in Activity 7.
Audio–Visual:	
Community:	

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental:

Integrated with:

CONCEPT NO. 1 - Energy

SUBJECT Language Arts

ORIENTATION How Does the Sun Affect Us?

TOPIC/UNIT Table Dramatization

BEHAVIORAL OBJECTIVES

Cognitive:

Demonstrate the effects of wind and sun by participating in a dramatization of the fable, acting the parts of the wind and sun.

Affective:

Perceive the different effects the sun has on people. Demonstrate awareness of effect that different amounts of sun can have on the behavior of people by suggesting that the person's behavior was the result of too little sun, too much sun, etc.

Skills Used:

1. Listening
2. Promote sensory image of how sun and wind feel and sound
3. Vocabulary

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

I. Language Arts
   A. Read the fable, "The Sun and the Wind". Dramatize. Ask: Who was the strongest? What can the sun and wind do for plants? When does the sun help us? When does the sun harm us? When does the wind help us? When does the wind harm us?
   B. After Thinking Time: Write a story, "The Sun Is My Friend". Illustrate.
   C. Complete the sentence: If the sun were my friend, I would.....Children may write answers or record them on tape. A spontaneous response in a discussion group could also be effective.

Outside or Community:

I. Language Arts
   A. Thinking Time: Sit outside in a quiet place for 5 minutes As you are sitting, think about these questions:

   Is it good to be here under the sun?

   How do you feel about yourself here?

   Would you like to come back?

   If you were an animal, would you like to be here? Or if you were a plant?

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: Fable - "Sun and the Wind" "Who Has Seen the Wind", by Rosetti "The Wind", by R. L. Stevenson Canticle of the Sun by St. Francis **Audio–Visual:** **Community:**	

E. S. E. A. Title III - PROJECT I-C-E 59-70-0135-4

Environmental:

Integrated with:

CONCEPT NO. I - Energy

SUBJECT Math and Science

ORIENTATION What Are Shadows?

TOPIC/UNIT Measuring Shadows

BEHAVIORAL OBJECTIVES

Cognitive:

Measure shadows and compare shadows of objects at various times of the day according to:

a. Location
b. Size
c. Darkness

Identify the basic hour of the day and describe activities normally done at that hour, by the position and size of the shadows.

Affective:

Demonstrate awareness of way shadows are made, explaining how, describing and demonstrating a range of shadow darkness to others in the class or to his parents.

Skills Used:

1. Telling time
2. Observation
3. Discussion
4. Comparison
5. Measuring

STUDENT-CENTERED LEARNING ACTIVITIES

In-Class:

I. Science
   A. What things are done at each hour of the day? Discuss how hours of light influence what we do, what animals do, and what happens to plants.

   B. Observe and discuss shadows. Sample question: What causes shadows? Use an electric light, a candle, a slide projector, flashlight, as well as the sun to develop them.

Outside or Community:

I. Math
   A. Measure shadows in the morning, at noon, in the afternoon.

      Which shadow is longer?
      What causes your shadow to lengthen and shorten?
      What happens to your shadow at noon?
      Why?

   B. Have several children stand in a straight line. Mark the length of each child's shadow with a stick. Now measure each one. Will they all be the same number of inches or feet? Why not?

   C. Take a large sheet of wrapping paper outside. Place it on the sidewalk so that your shadow falls on it. Have another child trace around it. Now cut it out.
      Is your shadow picture as tall as you are?
      Is it shorter than you are?
      Measure to find out.
      (shorter, longer, etc.)
      Use mathematical terms.
      Where was the sun when your picture was being drawn?

(Cont'd.)

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES

Publications:

Books:
Shadows
What Makes a Shadow?
Describing and classifying Measurement
Unit 4 Using Our Senses
Bragdon, Lillian, Tell Me the Time, Please, Philadelphia, Lippincott, '46
Francoise, What Time Is It Jean Marie? N. Y. Schribner, 1963

Audio–Visual:

Movie, Time for Clocks (color)
$4.00 BAVI 10 min.

Community:

OUTSIDE ACTIVITIES (Continued)

I. Math

Can you recognize your own shadow? Your friend's? Have children indicate tallest, shortest, etc. (again use mathematical terms)

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental:

Integrated with:

CONCEPT NO. 2 - Ecosystem

SUBJECT Science

ORIENTATION What Are Living Things?

TOPIC/UNIT Living and Non-living Things

BEHAVIORAL OBJECTIVES

Cognitive:

List characteristics of a living thing.

Select names of living things when reading a list of living and non-living things.

Affective:

Demonstrate awareness of the interaction of life cycles by finding examples that will indicate this in a wooded or park area.

Skills Used:

1. Distinguish between living and non-living things.
2. Cooperating with other children when planning an environmental outing.

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

I. Science

A. Observe fish in bowl. Place toy fish near bowl for comparison with live animal. Ask about live fish. Does it eat? Does it breathe? Does it move? Ask same questions about toy fish.
Conclude: An animal is a living thing; a toy is not.

B. Display a live plant and an artificial one. Ask: which is alive? Can you prove it? Bring out suggestion that we not water either for several days. Observe results.
Conclude: a plant is a living thing and needs water to stay alive.

C. Make a picture of any living thing.

D. Experiment to show that living things move themselves and non-living things need some force to make them move.

Living Things	Non-living
Venus flytrap	Swing
Plant in sunny window	Car
	Chalk
Sensitive plant	Bottle

(cont'd.)

Outside or Community:

I. Science

A. Go on walk to discover living things. Ask questions similar to those about fish & plants to determine if object is a living thing. At end of walk, make list of living things.
Conclude: Plants and animals are living. All other things are non-living. What were the non-living things we saw? (rocks, soil, air, water)?

B. On a nature walk, look for examples of how animals move, using such means as:

wings	fins	spines	tails
scales	legs	muscles	claws

See how many ways of moving can be found:

climbing	flying	crawling
jumping	running	rolling
sliding	swimming	borrowing

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES

Publications:

Books:
Soon After September: The Story of Living Things, McGraw-Hill Co., New York
Howell, Ruth, A Crack in the Pavement, N. Y. 1970

Audio-Visual:

NEWIST television science series (2nd semester)

Community:

Nature Trail

CLASSROOM (Continued)
I. D.

Living Things

Fish
Snake
People

E. Perhaps you could show a slow-motion film to illustrate the opening of a flower blossom.

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental:

CONCEPT NO. 2 - Ecosystem

ORIENTATION What Do Living Things Need?

Integrated with:

SUBJECT Science and Language Arts

TOPIC/UNIT Living and Non-living Interaction

BEHAVIORAL OBJECTIVES

Cognitive:

Make a three-part diagram to show interaction between plants and animals.

Describe the interaction between living and non-living things.

Affective:

Select other examples of animals and determine how they interact with their environment while out of the school setting.

Skills Used:

1. Listening for information
2. Writing an informational article
3. Observing
4. Identifying

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

I. Science & Language Arts

A. Make a picture of a living thing. Choose magazine pictures to show all the things for survival. Ex. - dog - doghouse, food, water, air, love.
Conclude that living things depend on other living things.

B. Make an experience chart. Use as a heading the name of a non-living thing. Together, children can write a story about how living things use and maintain the non-living.
Example: car
A car is used for travel. We wash and wax it. We fill it with gasoline and change its oil. We put air in the tires and take it to the garage for a checkup.
Conclude that living things use non-living things.

C. Recall nature walk & lists of living & non-living things. Ask: Do living things need non-living things?

Outside or Community:

(Continued)

SUGGESTED RESOURCES

Publications:

Books:

Puddles and Ponds
Busch, Phyllis S., World Pub. Co.
N. Y., 1969

Birds 130 In ICE
Booklet of poems and pictures

Audio-Visual:

Discovering Your Environment KT 26
I-C-E

Community:

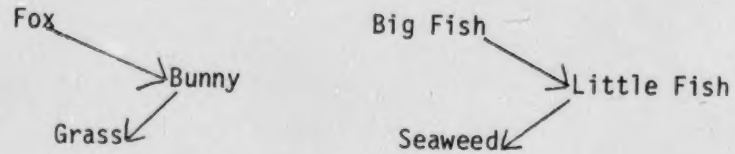
CONTINUED OR ADDED LEARNING ACTIVITIES

CLASSROOM (Continued)

I. * If nature walk from previous lesson has not been taken, it would be appropriate to take one now.

D. Discuss why animals live in particular areas. (alligator, bear, raccoon, duck).

E. On board put following examples:



Discuss interdependence shown.
Children should make a diagram (use pictures instead of words) with their own examples.

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental:

Integrated with:

CONCEPT NO. 2 - Ecosystem

SUBJECT Art and Social Studies

ORIENTATION How Can We Make an Ecosystem?

TOPIC/UNIT Creating Animals

BEHAVIORAL OBJECTIVES

Cognitive:

Identify differences and similarities that exist within the animal kingdom.

Explain how an ecosystem works in maintaining a balance of life and materials, and how plants and animals are interdependent.

Affective:

Question the faulty explanation as to why a given situation, in which the ecosystem is not balanced and cannot sustain itself in its present condition, will not continue indefinitely.

Skills Used:

1. Drawing
2. Mosaic Technique
3. Constructing large animals

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

I. Art

A. Review some of underwater interdependence diagrams. Observe aquarium so children can see actual underwater life. Make crayon-resist underwater drawings with blue watercolor wash showing sea life.

B. Make clay animals.

C. Using a mosaic technique, create forest animals--perhaps for a forest community mural.

D. Bag puppets - cover bag with construction paper. Add ears, whiskers, tail, detail (spots, stripes). etc.

E. Group project: Large painted animals. Students draw one large animal 3' tall and then paint with tempra.

(Continued)

Outside or Community:

I. Social Studies

A. Visit a local aquarium, tropical fish store or the home of a person having a tank of fish.

B. Visit to a museum (such as the County Museum in Milwaukee) to view the dioramas of sea life.

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications:	CLASSROOM (Continued) I. F. Mobile -- Animal faces created with cut construction paper on paper plate--both sides. Hang with string. Stress having things protrude from face. Curling, folding, tabs, cones and cylinders could be demonstrated. G. Zoo -- Each child will create one animal family and cage by cutting and pasting. Use thin strips for bars.
Audio–Visual: Environmental Awareness ICE Kit 16 "Colors in Nature" "Textures in Nature" "Patterns in Nature"	
Community:	

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental: **Integrated with:**

CONCEPT NO. 3 - Carrying Capacity **SUBJECT** Social Studies and Physical Education

ORIENTATION What Does Carrying Capacity Mean? **TOPIC/UNIT** Overpopulation

BEHAVIORAL OBJECTIVES

Cognitive:

Define carrying capacity.

Demonstrate a procedure that will show that each set of conditions has its own carrying capacity.

Affective:

Argue that there is a limit to the number or amount of things that can be provided for under a set of conditions and that it is unwise to exceed this number or amount.

Skills Used:

1. Counting
2. Recording

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

I. Social Studies

A. Bulletin board "The City and Overpopulation". Make skyscrapers, homes, stores, vehicles, etc. Add many people from catalogs.

Discuss problems that will arise when overpopulation occurs.

Outside or Community:

I. Physical Education

"A Hunting We Will Go". Children line up single file. First in line will become the hunter. Everyone behind become deer. Sing "A Hunting We Will Go, A Hunting We Will Go, Heigh-o! the Derry-oh! A Hunting We Will Go!" The line disperses when hunter yells "Bang." Hunter tags deer and they play dead.

Variations:

a. More hunters
b. Less hunting space

Discuss how wildlife is affected when an area is overpopulated.

a. Wildlife area restricted
b. Too many hunters
c. Too few animals

II. Social Studies

A. Visit some areas where carrying capacity is important. (elevator, car, small room, etc.) Find out what each of these places will hold. Count and record the number of people in each area.

(Continued)

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications:	OUTSIDE ACTIVITIES (Continued) II. A. 1. Find out how many people your school bus will hold. What happens if the bus is overcrowded? 2. What happens when too many children are using the playground at the same time? How many people does our playground hold? 3. What happens when too many children want to swim at the same time? How many people does a beach hold? We call the number of people an area holds the carrying capacity. (Use term "carrying capacity" in further discussions). B. Compare children's experiences of overcrowding with nature--when there are too many fish, some die; when there are too many frogs, some move out.
Audio-Visual:	
Community:	

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental: **Integrated with:**

CONCEPT NO. 3 - Carrying Capacity **SUBJECT** Physical Education and Social Studies

ORIENTATION Limits are set on the number of organisms in a place. **TOPIC/UNIT** Dodge Ball

BEHAVIORAL OBJECTIVES

Cognitive:

Play the game of Dodge Ball under given conditions that limit his performance and demonstrate type of adaption needed to participate in the activity under these conditions.

Affective:

Continue to explore types of spaces on his own and locate and describe these that:

a. Make him feel comfortable.
b. Uncomfortable.
c. Scared.
d. Joyful.

Skills Used:

1. Quick body movement to develop eye-hand-feet coordination.

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

I. Social Studies
A. Take all the children into a small room which will be overcrowded. After a few minutes, ask them how they feel in this space. Also ask why.

II. Physical Education
A. Teacher explain that we are going to play a ball game today. The name of the game is Dodge Ball. While some of us try to tag others with the ball, the others must try to keep away from the ball. You'll need two groups, taggers and dodgers. The "taggers" form a circle inside which the "dodgers" stand loosely around. The "taggers" continuously keep throwing the ball at the "dodgers", keeping it below waist level to avoid accidents. The "dodgers" keep trying to avoid the ball and must join the circle of "taggers" if the ball so much as touches them.

(Continued)

Outside or Community:

1. Social Studies
A. Take the children to a large room, a dining hall, gymnasium, church, etc. After a while, ask how this space makes them feel and why.

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: Nicks, Mel, Curriculum for Elementary Physical Education, Diocesan Dept. of Education, Green Bay, Wisconsin **Audio–Visual:** **Community:**	CLASSROOM (Continued) II. Physical Education B. Vary the grouping after each game: - boys be dodgers - girls be dodgers - those wearing red - those wearing blue - those wearing yellow - those wearing brown C. Startle them by asking everyone to join the circle of taggers. Then ask them to go ahead and play the game again. Is it possible? Why not? D. Continue discussion after this fashion: - How did you feel when the largest group was inside the circle? - How did you feel when the smallest group was inside the circle? - How did you feel as more and more people had to join the circle formation? Did you have more space for moving at the beginning of a new game or near the end when nearly everyone was tagged out?

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental:

Integrated with:

CONCEPT NO. 3 - Carrying Capacity

SUBJECT Physical Education

ORIENTATION How Does Man Affect the Balance of Nature?

TOPIC/UNIT Balance of Nature

BEHAVIORAL OBJECTIVES

Cognitive:

Orally give examples of effects of both wildlife imbalance and man on the environment in terms of food available.

Affective:

Demonstrate awareness of man's influence on the balance of nature by presenting examples that he has seen that:

a. help keep the balance of nature
b. destroy the balance of nature

Skills Used:

1. Locomotor skills
   a. running
   b. tagging
   c. dodging

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

I. Physical Education
   A. The Formation: 2 lines - 20', 40', or 50' apart. Players on one line, chaser in the center.
      1. Players are named for different animals: rabbit, fox, bear, tiger, moose.

      2. Chaser calls name of any animal he chooses. Ex. "deer!" All players who are deer run to opposite end of gym or playground. Chaser tries to tag them. Any player caught takes the part of chaser. The original chaser becomes another animal, thus having eliminated one or more of a certain species. The new chaser or chasers then all call on another group of animals.

      3. Modify game by creating an imbalance in numbers and discuss effects.

(Continued)

Outside or Community:

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications:	CLASSROOM (Continued) I. Physical Education B. The following games can be used to show carrying capacity - for first graders. eg. for the game suggested. It can be discussed in relation to hunter's quotas - when there are too many hunters the species is endangered. Hunter One person is the "Hunter". The rest of players stand in a straight line. Each player chooses the name of a wild animal. The "Hunter" starts walking and calls the name of an animal. The players who have chosen that animal fall in line behind the "Hunter". When the "Hunter" has called four animals, he then calls, "Let's all go hunting." Rest of players fall in line. The "Hunter" suddenly shouts "Bang!" and all players attempt to get back to the starting line without being tagged. All those tagged are "shot" and are out of the game until "Hunter" has had three turns.
Audio-Visual: "Animal Predators and the Balance of Nature", BAVI, 11 min., color	
Community:	

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental: **Integrated with:**

CONCEPT NO. 4 - Water **SUBJECT** Science, and Social Studies

ORIENTATION How Do We Use Water? **TOPIC/UNIT** Water Uses

BEHAVIORAL OBJECTIVES

Cognitive:

Draw three pictures of water use.

Affective:

Conscious of the importance of water in his life by finding examples of ways in which he uses water for:

a. his own physical needs and well-being
b. for pleasure
c. for aesthetic values

Skills Used:

1. To differentiate difference of land from water on maps and globes
2. Drawing
3. Observation

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

I. Science

A. Show pictures of the many places in the world where water is found (ocean, lake, pond, river). Point out bodies of water on globes, and on an assortment of maps.
   1. Give each child world map and U. S. map.
   2. Color water blue and land green.

B. Ask: Why do you think there is so much water in the world?

C. Discuss and illustrate different ways in which animals use water; eg., frogs, birds, fish, deer, and snakes.

D. Discuss and illustrate how each child likes to use water. Write a story called "Water Is Important".

E. Compare use of water in summer with use in winter.
   a. swimming pools
   b. ice skating rink

Outside or Community:

I. Social Studies

A. Tour school building and follow with discussion: kitchen, restroom, sinks, drinking fountains, janitor's room, etc. Places where water is essential.

B. Take children on planned trip to visit the source of water supply from their town. On return to the school, teacher writes down why pure water is needed. And also how we get our water.

SUGGESTED RESOURCES

Publications:

The First Book of Water by Joe Noring
Willy, The Story of Water by Jerome Spar
Rain, Rain, Rivers by Shulruitz
The Magic of Water, New York, Charles Schribner's Sons, Inc.
Good Rain by Goudey
Not Only for Ducks, The Story of Rain, McGraw-Hill Co., N. Y.
Things Around You, Steck-Vaughn Co., Science Series, ICE 500 WA2

Audio-Visual:

Pictures:
SCS or Picture File -
clear stream
people fishing in farm pond
water recreation.

Films:
We Explore the Stream - Coronet
Photographs from SCS or local water control company.
Water-How Water Helps Us, BAVI
Your Friend, the Water, 6 min., EBF
Film 510 Still Waters ICE-RMC

Community: (CONTINUED)

CONTINUED OR ADDED LEARNING ACTIVITIES

AUDIO-VISUAL (Continued)

F-181-D 11 min. (IMC)
Adventures of Junior Rain Drop, BAVI,
#0022 10 min., Color.
Your Friend the Water - Clean or Dirty,
color, 6 min. (EBF) BAVI

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental:

CONCEPT NO. 4 - Water

ORIENTATION What Is Water Pollution?

Integrated with:

SUBJECT Phy. Ed., Social Studies, Science & Art

TOPIC/UNIT Water Pollution

BEHAVIORAL OBJECTIVES

Cognitive:

Identify at least one sign of pollution observed on a field trip.

Affective:

Demonstrate that their help is needed in maintaining a pure water supply by preparing an experiment or demonstration which indicates ways that humans can help in maintaining a pure water supply.

Skills Used:

1. Oral answering
2. Making a collection
3. Water color painting

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

I. Art
   A. What happens to nice clean rain?
      1. Students could do a water color painting of a rainy day.
      2. They should continue to paint without changing water in which they rinse their brush.
      3. Water pollution could be associated with the dirty water of the water color container.

II. Science
   A. Experiment with water mixed with the following: soil, oil and detergents. What happens when it stands for a while?

   B. After visiting a stream, discuss ways that water pollution could have been prevented.

   C. Collect water in little jars. Get from various sources and let them set to see the sediment.

Outside or Community:

I. Social Studies

   A. Environmental Protection Agency
   Region VII
   911 Walnut
   Kansas City, Mo. 64106

   B. Ask for:
   The Adventures of Walter Raindrop
   Take a field trip to nearby stream or river and look for signs of water pollution. At this time, water samples could be procured.

   C. Write to:
   Environmental Protection Agency
   Office of Public Affairs
   1 North Wacker Drive
   Chicago, Illinois 60606
   Ask for:
   Needed: Clean Water
   Problems of Pollution
   (you may be able to get enough for entire class)

(Continued)

SUGGESTED RESOURCES

Publications:

Pamphlet - Needed: Clean Water
Wisconsin Dept. of Natural
Resources, P. O. Box 450,
Madison, Wisconsin 53701

Audio-Visual:

The Muddy Raindrops - SVE 430-6 $5.50
Water Pollution 614.7 filmstrips:
Green Bay Public Library
Film:
The Stream, ICE (320) 15 min.
Ecology Kit: Can I Drink the Water,
1971 - Urban Systems, Inc.

Community:

CONTINUED OR ADDED LEARNING ACTIVITIES

CLASSROOM (Continued)

II. Science

D. Display jars of polluted water and one jar of clean water. Discuss which children would like to drink and how water gets polluted.

E. How do families pollute water and how can we reduce pollution?

harsh detergents
chemicals (Drano)
grease (fats)
dyes
sewage

III. Physical Education

A. UNCLE SAM. Game

Divide the play area by 2 goals. Children are divided into polluters. One child is selected as Uncle Sam. He stands in the middle. Children call, "Uncle Sam, Uncle Sam, may we cross your polluted dam"? Uncle Sam replies, "Yes, you may if you are a coke bottle." They get a free run across. Those not mentioned remain on the line until Uncle Sam calls, "Go". They must cross the opposite end without being caught. If caught he goes to sideline; after 3 turns Uncle Sam chooses someone who is not caught to take his place. (Boys pick girls and reverse). When new "It" is chosen, all those caught return to game.

After children have played the game they may be able to choose more names of polluters and may wish to wear a label of a common polluter. Suggested list of polluters: paper, cans, cars, trucks, planes, factories, homes, garbage, and rubbish.

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental:

Integrated with:

CONCEPT NO. 4 - Water

SUBJECT Language Arts and Social Studies

ORIENTATION How Much Water Do We Need?

TOPIC/UNIT Water Depletion

BEHAVIORAL OBJECTIVES

Cognitive:

List things that would be impossible without water.

Affective:

Show awareness of the need for pure water for plant and animal life by giving water to plants and animals in the classroom. Defend the need for pure water for plants and animals with examples.

Skills Used:

1. Listing
2. Story-telling
3. Writing

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

I. Language Arts & Social Studies

A. Show pictures of places where there isn't water (desert, tundras).
Make bulletin board of above pictures.

B. To see if water is essential, the children will not use any water for a given amount of time. Children will list all things that were impossible without water. Children will tell story about:
   1. how they felt when they couldn't use water
   2. why he needs water

C. What would the ocean bed look like without water? Students should draw their ideas. Would it be cracked? Would there be any plants or animals? How would these look?

Outside or Community:

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications:	
Audio–Visual:	
Community:	

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental:

Integrated with:

CONCEPT NO. 5 - Air

SUBJECT Language Arts, Phy. Education & Science

ORIENTATION Why Do We Need Air?

TOPIC/UNIT Need for Air

BEHAVIORAL OBJECTIVES

Cognitive:

Describe ways in which we can determine the characteristics of air.

a. takes up space
b. colorless
c. supports life

Affective:

Show an appreciation of clean air in everyday living by making posters that tell people about the need for clean air.

Skills Used:

1. Draw

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

I. Science
A. Ask: When can we feel air? Does it feel different in summer and winter? What's in the air around us? Amount of discussion will depend on previous knowledge of children. This will be a good review of science unit on air.
B. Experiment: Child pinches nose and closes mouth while teacher counts to 10. Child tells how he feels without supply of air. Or else, tell the child to hold his breath for as long as he can.
C. Child feels his own body for his ribs and notices how chest expands when inhaling; contracts when exhaling.
D. Place jar over lighted candle and observe and discuss results.
E. Mural: "We Need Air." Include animals, people, and plants.

(Continued)

Outside or Community:

I. Physical Education

A. Invite a physical education teacher to exercise with children and emphasize the importance of a good air supply.

B. Physical exercises: walking, hopping, skipping, running, galloping, tiptoeing, sliding, etc. Faster exercises use more energy and child breathes faster.

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications:	CLASSROOM (Continued) II. Language Arts and Art A. Read and illustrate. Look around! A kite is flying, On the line the clothes are drying. We can't see air, but we feel it blow, We must breathe air to live and grow.
Audio–Visual: 6290 Air Around Us, color, 12 min., John Colburn, BAVI Filmstrips: Ocean of Air We Live In True Book of Your Body and You	
Community: Physical Education Teacher	

E. S. E. A. Title III — PROJECT I-C-E 59-70-0135-4

Environmental:

Integrated with:

CONCEPT NO. 5 - Air

SUBJECT Social Studies, Science

ORIENTATION What Is Air Pollution?

TOPIC/UNIT Air Pollution

BEHAVIORAL OBJECTIVES

Cognitive:

Through experiments, the child will demonstrate that air normally contains some impurities and moisture.

Affective:

Make suggestions as to how he can contribute to cleaner air.

Skills Used:

1. Experiment and think.

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

I. Science

A. To show that air is not clean, dust the top of a table or piano in morning. Put a book on its top. Check to see difference at end of day, second day, etc.

B. Hold metal spoon over candles. Observe carbon. What's going into the air" (smoke, chalk dust, fumes)

C. Bring in a strong smelling plant and discuss natural air pollutants.

D. Find pictures from magazines of things that produce odors: matches, bathroom spray, car and truck exhaust, flowers, barnyard manure, cooking foods like sauerkraut, gasoline, charcoal with a grill, bubble baths. Make a two-section chart:
Pleasant odors
Unpleasant odors

Outside or Community:

I. Social Studies

A. Environment Walk:
See Worksheet on next page.

B. Cover a picture frame or cardboard frame with cheese cloth. Hang it in a tree and observe the things that catch onto it.

C. Contact local hospital for free surgical masks for children to use for 1/2 day to dramatize living in polluted air.

D. Write to:
Environmental Protection Agency
Office of Public Affairs
1 North Wacker Drive
Chicago, Illinois 60606
Ask for:
Needed: Clean Air

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: Books: People and Their Environment Teachers' Curriculum Guide to Conservation Education, Grades 1-3 Let's Find Out What Is in the Air read to class. A Place to Live, National Audubon Society 1130 Fifth Avenue New York, New York 10028 **Audio-Visual:** Films: Air Is All Around Us Air and What It Does Ecology The Pollution Problem Teaching Pictures Written by Dr. Rillo ICE Environmental Activity Cards, Kit 40, ICE **Community:** Local hospital	

What Are Some Ways People Are Hurting the Environment?

1. Air Pollution:
   1. Stand outside your school. Look all around. Check all of the places you can see that air pollution is coming from:

_____factories _____buses

_____apartment houses _____airplanes

_____cars _____fires

2. Describe the sky. Is it clean? _____yes _____no

   Is it hazy? _____yes _____no

   Is it darker in some parts than others? _____yes _____no

3. Can you smell the air? _____yes _____no

4. Do your eyes tear or smart? _____yes _____no

   If possible, watch a bus leave a bus stop.
   Can you see the exhaust? _____yes _____no
   Can you smell the exhaust? _____yes _____no

5. Try to collect some pollutants.

   a. Wipe a car with a tissue. Paste a piece of the tissue below.

   b. Wipe a window ledge with a tissue. Paste a piece of the tissue below.

c. Go to a tree near a bus stop. Wipe a leaf with a tissue. Paste a piece of tissue below.

d. Go to a tree as far away as possible from bus stops and heavy traffic. Wipe a leaf with a tissue. Paste a piece of tissue below.

6. Sandpaper a small section of the stones on the outside of the school building.
Is there a difference in color? _____yes _____no

7. If there is snow on the ground, what color is it? _____white _____gray

How long ago did the snow fall? ____today ___yesterday ____a few days ago.

II. Litter:
Examine the litter under a tree, on the grassy strip between the sidewalk and the street, or in a vacant lot. Check the things you find. Some of these things will come apart soon. Some will last a long time and make the ground ugly. Draw a line from each thing you found to the right group.

GROUP 1	GROUP 2
Things that will make soil soon:	Things that will not make soil soon.

newspapers
cans
glass
soda can tabs
foil
candy wrappers
cigarettes

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental:

Integrated with:

CONCEPT NO. 5 - Air

SUBJECT Language Arts and Art

ORIENTATION What Is Air Pollution?

TOPIC/UNIT Air Pollution

BEHAVIORAL OBJECTIVES

Cognitive:

Write a story containing at least 3 words from the dictionary on pollution, in the proper definitional use.

Affective:

Demonstrate the feeling of the importance of clean air by creating a story having an example of the effect of unclean air or clean air, which can be told or presented to other class members.

Skills Used:

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

I. Language Arts
   A. Dirty Words
   Make a dictionary of pollution words. Make up your own title for your dictionary.
   B. Write a story, entitled: There's Something in the Air!
   C. Role Playing - What if you're a growing apple or a flower in bloom in polluted air? Express this feeling, tell your friend, write a poem or story. Draw a picture or dance it out.
   D. Paint an outdoor scene. Discuss what would happen to it if the air became polluted. Overlay a piece of gray tissue paper to create this polluted air effect. Discuss what effect this has on the colors and details in the painting.

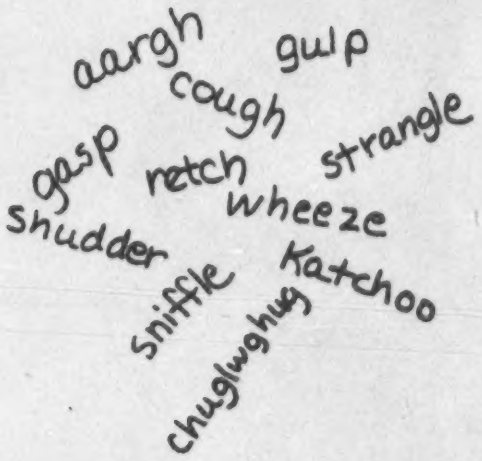
Outside or Community:

I. Art
A. Make a smoke print as a class project to show that burning produces pollution. Take a large sheet of typing paper and grease surface lightly with a little lard. Light candle and smoke-greased paper by moving it quickly back and forth over the flame. When the surface is black with soot, place soot side of paper up and put leaf, vein side down, on the blackened surface.

Cover leaf with another piece of paper and rub until leaf is inked thoroughly with soot and grease. Lift leaf and place soot side down on another piece of paper. Rub the leaf. Remove to see print.

BEST COPY AVAILABLE

Big bus at the bus stop.
Ready to go again.
Big noise.
Big cloud of



E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental: **Integrated with:**

CONCEPT NO. 5 - Air **SUBJECT** Music, Physical Education and Art

ORIENTATION Can We Write Pollution Verses to Songs? **TOPIC/UNIT** Pollution Songs

BEHAVIORAL OBJECTIVES

Cognitive:

Write lyrics dealing with air pollution to fit the rhythmic patterns for a given known melody.

Affective:

Participate in creating a song or poster illustrating the need for clean air.

Skills Used:

1. Writing lyrics

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

I. Music
- A. Review a familiar song.
  1. Blue Tail Fly
  2. My Bonnie Lies Over the Ocean
  3. Where, O Where Has My Little Dog Gone
  4. Twinkle, Twinkle, Little Star
  5. London Bridge Is Falling Down.
- B. Discussion related to air pollution listing responses on the board.
  1. What do you like about clean air?
  2. What do you like about the blue sky?
  3. What does polluted air look like?
- C. Write new words to the familiar melody - along the line of air pollution.

II. Art
- A. As a follow-up to the music lesson:
  Create a poster to communicate why we need clean air; use all cut or torn letters, substitute magazine pictures for some letters or words.

Outside or Community:

I. Physical Education
- A. Play "Here Comes 3000 Men to Work" only adapt to "Here Comes 3000 Men to Pollute".

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications:	
Audio–Visual:	
Community:	

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental:

Integrated with:

CONCEPT NO. 6 - Resources

SUBJECT Science, Social Studies and Language Arts

ORIENTATION How Do Animals Choose an Area?

TOPIC/UNIT Animal Adaption

BEHAVIORAL OBJECTIVES

Cognitive:

Give an example of a plant--animal that indicates the ability of a living thing to adapt to changes in its environment.

Give one example of a plant or animal that indicates that living things usually live where their needs are provided best.

Affective:

Value the need to preserve and protect animal and plant species in all areas by not destroying plants or animals while on a school field trip:

a. Not killing animals or plants.
b. Not destroying nests or houses of animals.
c. Not playing with baby animals.

Skills Used:

1. Observation
2. Cause-effect
3. Discussion
4. Analysis

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

I. Language Arts

A. Ask: why did dinosaurs become extinct? Relate to survival needs and adaptation.

B. Read stories about plants and animals. Tell Why plant or animal lives in a particular area.

1. Why are there no elephants in Wisconsin?
2. Why are there no polar bears in Africa?
3. Why are there no palm trees in Wisconsin?
4. Why are there no fish in the desert?

C. Show pictures of many kinds of vegetables, fruits, and cereals. Choose those that grow in community. Where do others grow? Why?
Make a booklet of:

1. Fruits growing in community and those shipped in all the time or part of the time.
2. Same as (1) but use vegetables.
3. Same as (1) but with flowers.

Outside or Community:

I. Social Studies

A. Visit school yard or neighborhood areas which show swamps, drainage ditches, sand hills, etc. On trip compare what grows in each area.

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES

Publications:

Rabbit Hill by Robert Lawson
Listen, Rabbit by Fisher
A Small Lab by Keith
You and the World Around You by Selsam
A Crack in the Pavement by Ruth Howell

Audio-Visual:

Our Wonderful Woodlands FS ST 7 Filmstrip and cassette and comic booklet
Why Plants Grow Where They Do, Coronet, 11 min., BAVI
Filmstrip: Animals of the Forest Series, McGraw-Hill, ICE FS St8 (5 filmstrips)

Community:

CLASSROOM (Continued)

II. Science

A. Mural: Fall - make in the fall season, winter in winter, etc. Put in general characteristics. Link up seasons with animal life - how seasons affect animal life (bird migration, hibernation, shedding of hair, building homes, storing of food).

B. Compare weather in different areas of the U. S. (newspaper, radio, TV) Booklet: Animals. Group animals in Jungle, Cold Land, Desert, Temperate--label each.

C. Make a terrarium to show plants that are native to the area. Add a plant (as cactus) that is not native. Observe results: discuss results as related to geographic and climatic conditions.

D. Set up an aquarium to demonstrate which animals live best in/near water (frog, turtle, goldfish).

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental:

Integrated with:

CONCEPT NO. 6 - Resources

SUBJECT Social Studies

ORIENTATION How Has Our Use of Resources Changed?

TOPIC/UNIT Changes in Use of Resources

BEHAVIORAL OBJECTIVES

Cognitive:

Construct or illustrate a village of long ago including the natural resources of wood, trees, cabins, animal skins, etc.

Explain how our living habits have changed in the last couple of centuries.

Affective:

Demonstrate awareness of abuses in managing natural resources by identifying examples while on a trip or from pictures.

Skills Used:

1. Make a mural
2. Discussion
3. Cause-effect thinking

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

I. Social Studies
   A. How does a city become a city? (People chopped down trees and built log cabins, more people came, inventions changed us and our land.
   B. Compare free time activities of long ago to free time activities today.
   C. Discuss the effect of natural resources on the migration of early settlers:
      1. The gold rush
      2. Lumber industry
      3. Fur trade
   D. Discuss the abuse of natural resources and how it affected our life today.
      a. Gas shortage
      b. Extinction of animal species
   E. Bring in antiques and their modern counterpart. Discuss and compare how antique appliances required more muscle activity and new modern appliances use our supply of natural resources; eg. hand mixer vs. electric mixer.

Outside or Community:

I. Social Studies
   A. Invite old residents to give short talk or to answer questions about the "old days".
   B. Have manufacturer of wood products in the area talk about how trees are used.

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications:	
Audio–Visual: "Boomsville" ICE (400) Man and His Environment ICE Simulation Game #4	
Community: State Historical Society for information on local areas.	

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental: **Integrated with:**

CONCEPT NO. 6 - Resources **SUBJECT** Art

ORIENTATION Can We Make a Design Using Nature? **TOPIC/UNIT** Leaf Texture Rubbings

BEHAVIORAL OBJECTIVES

Cognitive:

Explain ways in which nature has served as an inspiration for man's artifacts, in realistic, decorative or abstract styles.

Affective:

Demonstrate appreciation of design in nature by choosing a design from nature when asked to make a design. Examples: Leaf or cobweb.

Skills Used:

1. Properties of clay
2. Basic hand methods of working with clay.

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

I. Art
   A. Discuss where leaf designs are seen other than in nature.
      1. Textiles (fabric prints)
      2. Wallpaper
      3. Ceramic designs

   B. Process:
      1. Wedge clay
      2. Roll out 1/4 to 3/8" thick
      3. Press leaf into clay to gain leaf texture
      4. Trim away excess clay
      5. Bend edges and stem if desired
      6. Pierce hole through stem to hand leaf upon completion.
      7. Let dry
      8. Bisque fire
      9. Add glaze, fire again

Outside or Community:

I. Art
   A. Gather leaves outside.

      1. Texture rubbings. Make a variety of crayon rubbings from nature. Using rubbings, cut out suggested shapes (e.g. tree texture, a tree cross-hatch texture body of a fish, rough stipple texture, a snail, etc.) Glue these shapes to a background piece of paper to create a picture.

      2. Develop a design consisting of six or seven related shapes.

      3. Create textured patterns by using various combinations of pen strokes. (cross-hatching, stippling, variations and combinations.)

SUGGESTED RESOURCES

Publications:

A Ceramic Leaf, Today's Art, School Ed., Vol. 17 #12
Clay Is Fur, R. G. Yoder, School Arts
Ecological Ceramics, C. Heiple, Arts and Activities 69:29-31 March '71
Ceramics for Beginners, Arts and Activities, June '67
Clay in the Curriculum, Arts and Activities, March '70
Sand Casting for 6-Year-Olds, Arts and Activities, Feb. '72

Audio-Visual: (Continued)

Community:

CONTINUED OR ADDED LEARNING ACTIVITIES

PUBLICATIONS: (Continued)

Ecological Ceramics, Arts and Activities, March '71
Clay Mushrooms, Arts and Activities, March '71

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental:

Integrated with:

CONCEPT NO. 6 - Resources

SUBJECT Language Arts, Social Studies & Phy.Education

ORIENTATION What Does a Forest Fire Do?

TOPIC/UNIT Effect of Forest Fires

BEHAVIORAL OBJECTIVES

Cognitive:

Describe three effects of our vanishing forests.

Affective:

Show concern about the loss of forests as a natural resource by participating in a discussion in which the loss of forests is the topic.

Skills Used:

1. Running
2. Tagging
3. Dodging
4. Fair play

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

I. Language Arts
   A. Discussion about pictures of forest fires. Let them focus their discussion on the plight of the animal in the vanishing forests. The discussion could also talk about other effects on our forest; as a needed resource for wood products, farm land, expansion of cities, expansion of leisure time facilities, etc.

Outside or Community:

I. Social Studies
   A. Have a forest ranger speak to the class. (Contact County Court House.)

   B. Collect pictures showing a contrast between a beautiful forest and one burned down.
      Trees
      Animals, etc.

II. Physical Education
   A. Game illustrates the plight of the animal searching for a home.
      Squirrels and Trees

      1. Players in groups of three with hands clasped together, forming a tree. One squirrel is placed in each tree. One odd squirrel is without a tree.

      2. The "It" person is the fox and chases the squirrel. The squirrel reaches safety when he takes a tree and the other squirrel must run. If he is caught, he changes roles with the

(Continued)

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: Smokey the Bear Storybook, I-C-E - RMC **Audio-Visual:** 4635 Our Natural Resources, 11 min., color, Dowling, BAVI $3.75 **Community:**	OUTSIDE ACTIVITIES (Continued) II. Physical Education A. 2. fox and becomes the catcher. 3. When a new squirrel enters a tree, rotate with a part of the tree; therefore, letting everyone have a chance to run.

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental:

Integrated with:

CONCEPT NO. 7 - Land Use

SUBJECT Art, and Social Studies

ORIENTATION Transportation

TOPIC/UNIT Effect of Transportation

BEHAVIORAL OBJECTIVES

Cognitive:

Identify which of two given types of transportation is the more recent.

Determine which form of transportation is better than others in a given situation and give reasons for the selection.

Affective:

Demonstrate awareness of the different types of transportation and how he can use them by identification of types and uses while he is on a trip.

Skills Used:

1. Listing
2. Discussions
3. Community studies
4. Comparisons

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

I. Art
   A. Create a simple collage by gluing yarn or string onto paper or tagboard in design representative of highway patterns seen on maps, films, or outside on field trips.

II. Social Studies
   A. Display pictures of transportation modes:
      Ex.: horse & wagon
           Model T
           New car
      Ex.: Pirate ship
           Ocean cruiser

      Children should put each set of pictures in chronological order.

   B. Children tell what they do with their leisure time. Ask what their mom and dad do for hobbies.

   C. Write a class story about going on a trip if they were pioneers. (Covered wagons, horseback, horse and buggy, walking, stagecoach, etc.)

Outside or Community:

I. Social Studies
   A. Take a trip to the country. Why do people live there? How is the land used?

   B. Take a trip to the nearest town or city. Why do people live there? (Nearness to work, closer neighbors)? How is the land used? (Homes, factories, stores, sidewalks, highways, lawn, gardens, trees, parks, etc.)

   C. Count the number of steps to your friend's house. How many minutes did the walk take? Could you travel there a faster way? If you took your bicycle, how long would it take?

   D. Visit city park to see facilities for young and old. Notice residential area and back yards. Why are parks necessary?

   E. Field trip to area with highway, preferably one with turnoff, interchanges or cloverleaf. Have class bring in highway maps and observe patterns.

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES

Publications:

Audio–Visual:

Films:
Transportation: Footpath to Air
Lana, color, 16 min., BAVI
Churchill
Children at Work and Play Around
the World, B&W, 20 min., BAVI
United World
America, the Beautiful, color,
20 min. BAVI

Community:

CLASSROOM (Continued)

II. Social Studies

C. Would it take longer to travel? How would you take care of the horses?

D. Talk about resort towns such as Door County has. Why do people like to vacation there? (It is away from the city, to do leisure time activities--boating, picnics photography, swimming, water skiing, hiking, fishing). What activities take place during winter, fall and spring?

E. Compare schools of today and long ago. (Long ago--all eight grades, within walking distance of home, furniture, etc. Now--bus transportation, one grade per room, audio-visual equipment, furniture). Take tour of school building and audio-visual department.

F. What brought about the change in travel?
1. Desire to explore new lands
2. Desire to move supplies further, faster.
3. Inventions that brought about machines and vehicles to propel man faster and further.

As machines were developed, did fuels need to be developed, and as they were developed and used, what effect did result on our environment? What effect on the economy resulted from the development of transportation?

Environmental: **Integrated with:**

CONCEPT NO. 7 - Land Use **SUBJECT** Language Arts, Social Studies and Science

ORIENTATION Land Use **TOPIC/UNIT** Homes

BEHAVIORAL OBJECTIVES

Cognitive:

Compare a home then and now in terms of:

a. conveniences contained
b. style of home
c. materials used

Draw a picture showing the two homes with the characteristics included in the previous objective.

Affective:

Debate the pro point of view that modern inventions create more leisure time for families which in turn create environmental problems.

Skills Used:

1. Discussion
2. Comparing
3. Drawing
4. Building a bulletin board

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

I. Social Studies

A. Show pictures and items of homes long ago. Discuss the use of different parts of the home. Pupils can draw a picture of an old house.

B. Pupils can bring pictures of their homes and discuss the things that we have now which were not in the old homes.

C. Compare the two types of homes, especially the many conveniences that help give more leisure time. Let pupils bring out reasons for changes in home. Discuss the yards around homes too.

D. Make a bulletin board comparing the two homes then and now. Pupils can draw them or bring in examples.

(Continued)

Outside or Community:

I. Social Studies

A. Visit museum or a historical house to see how life was long ago.

B. Visit a model home.

C. Invite a senior citizen of the community to tell about homes when he was a child, and to tell of his childhood (leisure) activities.

D. Field trip to see what things can be included in a model neighborhood. Perhaps continued trips to aid "what if" solution.

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES

Publications:

Audio–Visual:

Homes Around the World, United - World Film
The Treehouse, Brown Co. Library

Community:

Museum or historical home
Senior citizen of community

CLASSROOM (Continued)

II. Art
   A. The class can create a miniature model neighborhood on a table top or in a sandbox using a variety of media: clay, animals, top cars, boats, box houses, pipe cleaner fences.

      A "what if" possibility is given and the students are required to make the necessary changes in their model neighborhood.
      Example:
      a. What if a proposed highway is planned to go right through the neighborhood?
      b. What if there was a sudden influx of people into the area?

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental: **Integrated with:**

CONCEPT NO. 7 - Land Use **SUBJECT** Language Arts

ORIENTATION Land Use - Snowmobiling **TOPIC/UNIT** Snowmobiling

BEHAVIORAL OBJECTIVES

Cognitive:

Demonstrate how prevalent snowmobiles are in his community through drawings.

Affective:

Argue that snowmobiles have detrimental effects on wild life, use of land and people's lives unless properly used.

Skills Used:

1. Drawing
2. Discussion
3. Dramatization

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

I. Language Arts

A. Draw pictures of different types of snowmobiles. Children can bring in pictures or models of their favorite.

B. Discuss some of the ways snowmobiles can be put to good use:
   1. rescuing people
   2. taking feed to livestock
   3. enabling people in remote areas to get to other places
   4. improved prosperity of given areas

C. Discuss some of the ways snowmobiles are used in an abusive manner:
   1. breaking laws and invading privacy
   2. invading the scarcity of wild life areas (frightening animals)
   3. noise and air pollutants
   4. disregarding safety regulations
   5. destruction of property and littering.

(Continued)

Outside or Community:

I. Language Arts

A. Invite a snowmobile enthusiast to talk about the recreational value of snowmobiles.

B. Invite a law enforcement officer to talk about the responsibilities of snowmobile owners in town and out. (also enumerate on law and safety regulations and rights of others).

C. Invite a property owner to talk about his right to privacy and how smowmobilers have often violated this privacy. (possible solutions).

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES

Publications:

Wis. Conservation Bulletion ICE
Nov.-Dec., 1972 p. 3
Mission
"Better Snowmobile Driving"
p. 8 "Off the Beaten Track"
Jan.-Feb., 1972 p. 6
"Snowmobile Trails for You"

Audio-Visual:

Community:

CLASSROOM (continued)

D. Dramatize how student would feel if he were an animal in the woods and were suddenly invaded by a noisy fearful machine. This dramatization could be extended to farm animals.

E. Dramatize how student could use a snowmobile in helping someone else.

If I Were

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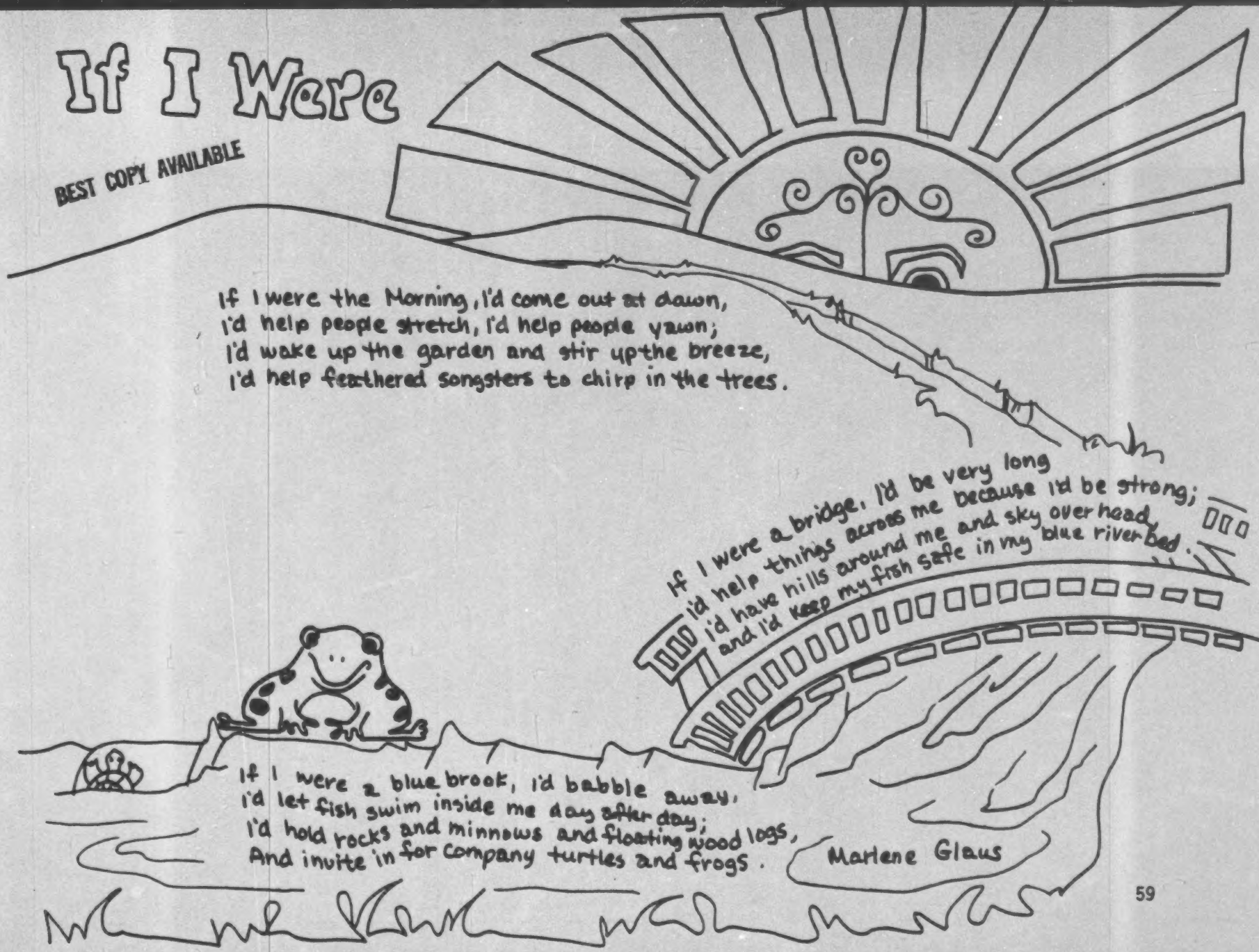

If I were the Morning, I'd come out at dawn,
I'd help people stretch, I'd help people yawn;
I'd wake up the garden and stir up the breeze,
I'd help feathered songsters to chirp in the trees.

If I were a bridge, I'd be very long
I'd help things across me because I'd be strong;
I'd have hills around me and sky overhead,
and I'd keep my fish safe in my blue riverbed.

If I were a blue brook, I'd babble away,
I'd let fish swim inside me day after day;
I'd hold rocks and minnows and floating wood logs,
And invite in for company turtles and frogs.

Marlene Glaus

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental:

CONCEPT NO. 7 - Land Use

ORIENTATION Land-Use - Camping

Integrated with:

SUBJECT Language Arts, Science and Soc. Studies

TOPIC/UNIT Camping

BEHAVIORAL OBJECTIVES

Cognitive:

Illustrate the effect the recent (last 20 years') camping trend has had on forest areas by drawing before and after pictures of camping areas:

a. Amount
b. Care

Affective:

Defend the use even though much of our land is being taken over for recreational purposes.

Skills Used:

1. Comparing
2. Drawing
3. Discussion

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

I. Social Studies
A. Through the use of a bulletin board:
1. Show the use of park and/or forest area years ago, and how it looks today in regard to camping. (Start with a forest and gradually replace trees with camp sites.)

2. Draw a picture of a camping area you have seen.

3. Discuss how a camp ground is used during the 4 seasons.

4. Discuss how transportation, economic conditions, population growth and leisure time have affected the camp ground.

5. Discuss the use of wood in a campground. Compare woods use today as one for recreational or aesthetic purposes as to an essential use years ago.

6. Discuss the problem created by excessive use of the land by campers (litter, destruction of plant & animal life, fire possibility).

Outside or Community:

I. Social Studies
A. Visit a camp ground in your area. Discuss what changes take place in autumn, winter, spring and summer. (When is the camp ground used most - least?)

B. Conservation worker to discuse responsibilities of campers and others using forests and streams.

C. Park attendant or manager to discuss his work and numbers of persons using parks and responsibilities.

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications:	
Audio–Visual:	
Community:	

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental:

Integrated with:

CONCEPT NO. 8 - Values and Attitudes **SUBJECT** Language Arts

ORIENTATION Land Use Attitudes **TOPIC/UNIT** Water and Weeds

BEHAVIORAL OBJECTIVES

Cognitive:

Differentiate between things that are wants and needs of a person.

Affective:

Debate the importance of satisfying the wants of an individual.

a. pro viewpoint
b. negative viewpoint

Skills Used:

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

I. Language Arts

A. Write or discuss: "What can I do to enjoy the out-of-doors more often?" What can my parents do to enjoy the out-of-doors more often?

B. Make a list of 10 things you like. Make another list of 10 things you don't like. From the list of 10 you like choose those that are most important to you. After this, hold a discussion about differing values.

C. What are some things TV wants us to buy? Which do we really need?

D. Bulletin Board: Needing and Wanting. Say to class, "Many Things We Use Cause Pollution. We need some of them... but do we really need all of them?"

What things do you think we use that cause pollution, but aren't really necessary? Cut out ads showing them and we'll put on bulletin board.

Outside or Community:

(Continued)

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: Publications: Fun With the Environment by U. S. Environmental Protection Agency, Washington, D. C. **Audio–Visual:** **Community:**	CLASSROOM (Continued) Then write, "Why Do You Think We Buy These Things if We Don't Really Need Them"? Also put on bulletin board. E. Ask the class members to determine what goods and services are produced by their parents.

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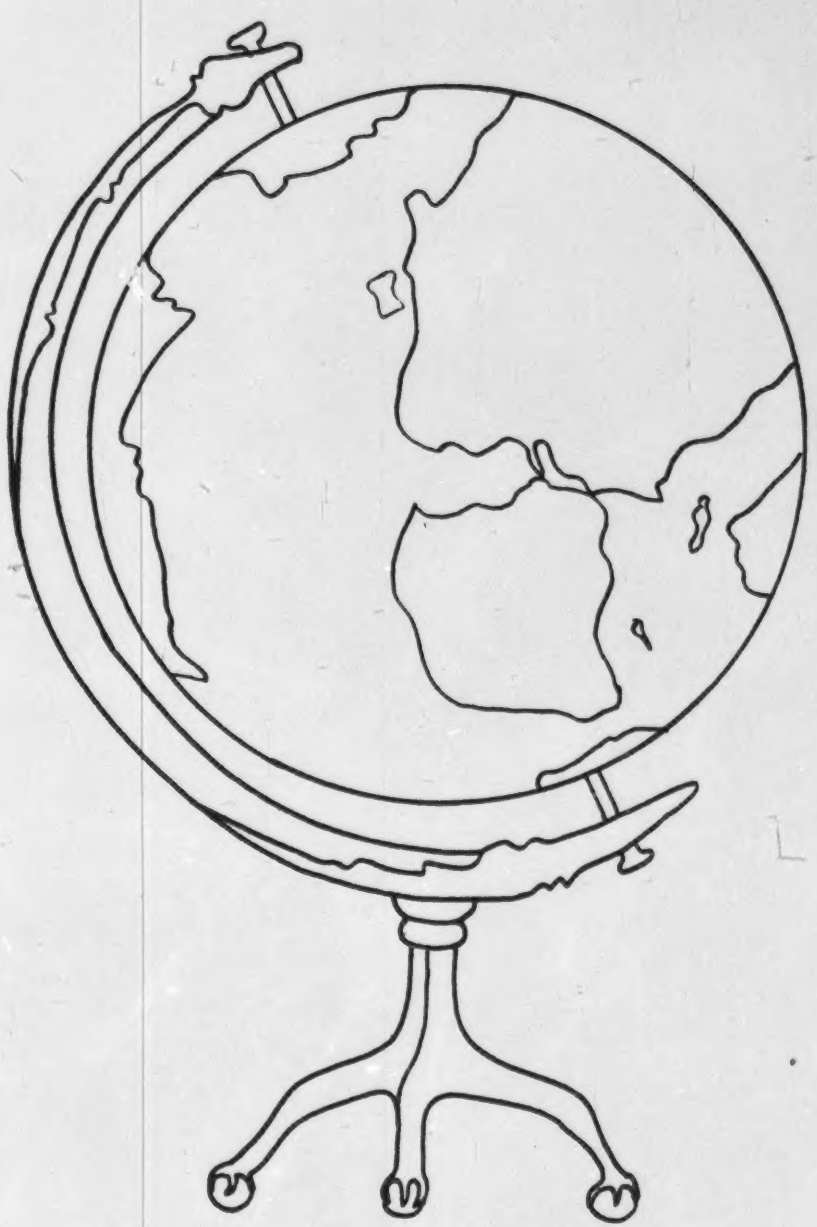


The World

All the things you know,
All the things you do,
Are part of the world,
And the world is <u>you</u>.

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental:

Integrated with:

CONCEPT NO. 9 - Management

SUBJECT Social Studies

ORIENTATION Yard & Neighborhood Beautification.

TOPIC/UNIT Land Beautification

BEHAVIORAL OBJECTIVES

Cognitive:

Demonstrate to the class a procedure for improving his home neighborhood by:

a. Improving looks
b. Reducing litter

Affective:

Participate in beautifying his neighborhood by:

a. cutting weeds
b. picking up litter
c. planting flowers

Skills Used:

1. Planting seeds
2. Construction
3. Making scrapbook
4. Dramatization
5. Planning a trip

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

I. Social Studies

A. Plant flower seeds in a milk carton or cans or pots, to be taken home to beautify house or yard.

B. Make a scrapbook of pictures of orderly yards and neighborhoods as compared to littered ones. Make posters showing well-kept ones.

C. Make up and present a play to demonstrate the importance of keeping our surroundings clean.

D. Show pictures of plants that can be used to beautify a yard.

E. Make posters to illustrate well-kept yard or neighborhood.

Outside or Community:

I. Social Studies

A. Visit a well-kept yard and talk to owner about how it is maintained.

B. Have person who works for city sanitation department talk to class about his job.

C. Secure and plant a tree in school yard to beautify it.

D. Trip to picnic area to demonstrate to class how they can help keep environment clean, by cleaning up their picnic area.

E. Walk around the block to observe the amount of litter to be found in a given area. Make plans to do something about it.

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications:	
Audio–Visual: Film 310 Junk-dump ICE Treehouse ICE One Day at Teton Marsh ICE (200)	
Community:	

E. S. E. A. Title III – PROJECT I-C-E 59-70-0135-4

Environmental: **Integrated with:**

CONCEPT NO. 9 - Management **SUBJECT** Social Studies

ORIENTATION Classroom and School Beautification **TOPIC/UNIT** Classroom Improvements

BEHAVIORAL OBJECTIVES

Cognitive:

Demonstrate that there are many things they can do to make the classroom and school a better place to be through discussion, explanation and construction.

Affective:

Participate in a class project that will change the environment to suit his desires for a better environment.

Skills Used:

1. Discussion
2. Drawing
3. Dramatization
4. Observation

STUDENT-CENTERED LEARNING ACTIVITIES

In-Class:

I. Social Studies
   A. Take a look at the classroom.
      1. What is the best thing about it?
      2. What is the worst thing about it?
      3. After listening to answers, discuss what the students can do to improve the room.
      4. Have students draw and color a picture of the ideal classroom. (Lighting, neatness, plants, floor rugs, aquarium, rearrangement)

   B. Students will form groups in charge of improving different parts of the classroom.

   C. Involve other classrooms in the school to help keep the school yard in good condition.

   D. After a messy art lesson, use the opportunity to make the children aware of litter and how they can help the situation.

Outside or Community:

I. Social Studies
   A. Have children look around their homes for things to bring to class to beautify their classroom.

   B. Invite the school janitor to talk with the class about the importance of a clean school.

(CONTINUED)

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: Teacher's Curriculum Guide to Conservation Ed **Audio–Visual:** Discovering Your Environment Kit 16 "School Lawns" **Community:**	CLASSROOM (Continued) E. Divide the bulletin board into three parts and label at at the top: a. Land as it grew (natural) b. Land man changed for the good of men c. Land man used badly. The children are to make a collage on a bulletin board using pictures from magazines and newspapers, which they have obtained and brought to class.

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental: **Integrated with:**

CONCEPT NO. 9 - Management **SUBJECT** Science

ORIENTATION Temperature Control **TOPIC/UNIT** Temperature Control

BEHAVIORAL OBJECTIVES

Cognitive:

Read a thermometer and keep a record of the temperature for one week, on paper or chalkboard.

Explain different ways man adapts to differences in temperature in his life.

Affective:

Suggests temperature as being the cause of a person feeling sluggish, active, etc.

Skills Used:

1. Discussion
2. Reading a thermometer
3. Writing temperature
4. Reporting
5. Record keeping

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

I. Science
   A. Introduce seasons and the temperature change in each.
   1. What was the temperature yesterday?
   2. What was the temperature last week?
   3. Temperature last month?
   4. During the winter? etc.
   B. Bring thermometer in and practice reading thermometer. Keep records of temperature outside for one week. Compare coldest temperature and warmest. Children will do the reading of the thermometer.
   C. Ask question: How does man control the change of temperature? Clothing, fires, air-conditioners.
   1. Have children bring in clothing samples of how they would dress in a certain season.
   2. Children report to school on how the temperature is controlled in their home.

Outside or Community:

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: Air Is All Around You New York, Crowell 1962 **Audio–Visual:** Film: Air and What It Does Encyclopaedia Britannica Films, Inc. 1150 Wilmette Avenue Wilmette, Illinois **Community:** Weatherman Heating and cooling man Businessman that deals with clothing. Could be a father, uncle, etc.	

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental:

Integrated with:

CONCEPT NO. 9 - Management

SUBJECT Art

ORIENTATION How Can Clay Show That We Can Manipulate Our Environment

TOPIC/UNIT Clay Project

BEHAVIORAL OBJECTIVES

Cognitive:

Describe how man is able to control his environment through the analogy to a piece of clay.

Affective:

Sensitive to the need to control our environment by identifying examples of little or no control while on a field trip.

Skills Used:

1. Increasing manual dexterity
2. Basic clay working techniques

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

I. Art
   A. How do you explain to a 5-8-year-old child that man can change and manipulate his environment through an art project? The answer: By using one of the most manipulative mediums known to art - clay.

   B. Each student will be given a block of clay (size depends on quantity available).

   C. This block of clay is theirs to form whatever they wish, just as our environment is ours to form whatever we wish. If the student manipulates and changes his clay with care and thought, he will come forth with a rewarding product, if not disaster. The same thing holds true with us and our environment. (Note: when doing this project the environmental lesson must be taught or the project is worthless).

Outside or Community:

I. Art
   A. If the area is conducive. have the students go outdoors and get your own clay.

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: "Clay Is Fun" R. A. Yoder, School Arts, p. 20-1 Oct. '71 "It Just Happened, Clay Modeling" Arts and Activities 69:22-4 Mr. '71 **Audio–Visual:** "Creating With Clay", B.F.A. Available for rental from BAVI **Community:**	

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental:

Integrated with:

CONCEPT NO. 9 - Management

SUBJECT Art

ORIENTATION Nature As an Inspiration for Overall Design

TOPIC/UNIT Overall Environment Design

BEHAVIORAL OBJECTIVES

Cognitive:

Translates a design of nature into a textile design on paper with drawing pencils.

Affective:

Actively participates in creating a textile design on paper.

Skills Used:

1. Basic relief printing techniques
2. Rhythm in design

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

I. Art

A. Many patterns that occur in nature, man adapts to his life in sculptural forms, color usage, and textile designs. To see how this is done, we will use a potato print.

B. Armed with drawing paper and pencils, go outside and sketch interesting patterns that occur in nature, eg; floral designs, leaves, textures, mushrooms, branches, etc.

C. Back in the classroom, choose the design you like best.

D. Cut a potato in half and onto the exposed part of your potato draw your design.

E. Cut around your design so it is in relief.

F. Paint relief surface and print on a sheet of paper.

G. Continue repeating design so you have an overall pattern such as a textile design. (Note: color of design may be kept the same or printed in different colors).

Outside or Community:

I. Art

A. Get a wallpaper sample book to show overall patterns and designs utilized from nature.

B. Take alphabet observation hike. (See next page).

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications:	
Audio–Visual: How To Make Potato Prints, B.F.A. Available for rental from BAVI Alphabet Observation Hike, Field Act. No. 25, ICE	
Community:	

ALPHABET OBSERVATION HIKE

PURPOSE; To help the individual become aware of native materials found in the outdoors through direct observations.

PROCEDURE: Divide into small groups and have each group list as many natural items they can find beginning with each letter of the alphabet.

DESCRIPTIVE WRITING

DIRECTIONS: Find the objects listed below and then do the following things with each object:

1. look at the object
2. Feel the object
3. Smell the object
4. Listen for sounds which may come from it or are associated with it.
5. Taste it (if safe to do so)

Write as many descriptive words as the basis for description as you can using your sensory experiences. Some possible examples are:

1. This year's deciduous leaf
2. This year's evergreen leaf
3. Last year's deciduous leaf
4. River water
5. Water from the stream
6. Wet soil along the river
7. A rock
8. Twig on a tree
9. A flower
10. Bark on a tree

* Northern Illinois University

WORDS INTO PICTURES

In my fifth grade class we are trying to become more exact in expressing our ideas. To help in this effort, I asked each student to write a descriptive paper on an imaginary animal. Then, without warning, I had them exchange papers. Next, I asked each child to draw a picture of the description he received.

Their enthusiasm was high, their reactions natural and critical: 'Nothing here tells me how big it's supposed to be.' 'I can't make him do anything because that was left out.'

After several attempts at this activity, the student's descriptions, and thereafter their pictures, became much more detailed.

* Shirley R. Secord, fifth grade teacher
Central School, Natick, Mass.

LANGUAGE ARTS ACTIVITIES

Play "blind" and describe various outdoor situations.
Write a letter home or to a friend.
Take field notes.
Use the camp library for research and reading.
Tell some original "tall tales".
Write a story or a song about the out-of-doors.
Plan and prepare a tape of your outdoor experiences.
Write a poem about the Mississippi. (Fox River)
Take a camera hike.
Keep an outdoor diary or "log".
Practice careful listening.
Recognize and record new "outdoor words".
Write new words in snow, sand, or moist earth.
Enrich word meanings.
Make temporary or permanent labels for a nature trail.
Use children for "living labels".
Make a trail guide.
Produce one-sentence descriptions.
Describe a natural phenomena such as a storm.
Write stories or poems about natural objects.
Give news or weather reports.
Compose a myth or legend about some area or object.
Identify and label specimens.
Keep a diary or write a story about "My Spot" (an outdoor area chosen by the student of particular interest to him)
"Space Traveler" --- describe our environment from an outsider's point of view.
Take some good "nature notes".
Describe various outdoor odors using proper terminology.
Learn to spell the names of trees, animals, etc.
Talk with "oldtimers" to learn the history of trees.
Start a tree calendar and diary.
Make a list of "outdoor" sounds and weave them into a story.
List several adjectives such as soft, smooth, twisted, and hunt for nature objects to fit these words.
Describe nature sounds in writing.
Compose outdoor rope-skipping rhymes.
Write a story about "stars".
Compose a "ballad".
Prepare a radio or television program. (make-believe)
Use charades to portray new outdoor vocabulary words.
Interview various adults about the out-of-doors game warden.
Dramatize some "problems" of the pioneers or Indians.

E. S. E. A. Title III — PROJECT I–C–E 59–70–0135–4

Environmental:

Integrated with:

CONCEPT NO. 9 - Management

SUBJECT Art

ORIENTATION Urban Environment

TOPIC/UNIT Diorama

BEHAVIORAL OBJECTIVES

Cognitive:

Describe the characteristics of a city structure.

Affective:

Conscious of the make-up of the city by identifying cars, people and buildings as all being a part of the make-up of the city.

Skills Used:

1. Construction
2. Cutting
3. Pasting

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

I. Art
   A. Make a city diorama.

   1. Cut out pictures of people, buildings, trees, cars, anything that's found in your city.

   2. Paste a piece of cardboard on the back.

   3. Draw blocks and streets, & manhole cover on a big piece of cardboard or the bottom of a large box.

   4. Assemble your pictures and place them in the city in their appropriate places.

Outside or Community:

I. Art

   A. Have the students take note of the streets and area around them on their way to and from school.

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: "Community Planning Handbook" #110 ICE RMC Gi "A Place To Live" #110 A ICE RMC **Audio–Visual:** **Community:**	

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental:

Integrated with:

CONCEPT NO. 9 - Management

SUBJECT Social Studies, Phy. Education & Music

ORIENTATION Man vs. Environment

TOPIC/UNIT Low Organization Games

BEHAVIORAL OBJECTIVES

Cognitive:

After playing the games and discussing how man changes his environment, 75% of the children will be able to list five ways they can change their home environment.

Affective:

Demonstrate his role in improving his environment by making and using litterbags.

Skills Used:

1. Running
2. Throwing
3. Rhythmic

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

I. Music and Physical Education
   A. Pick the Pumpkin Patch (on back)
   B. Mulberry Bush Record
   To the words of Mulberry Bush, the classroom teacher may put words into the song to fit the classroom environment instead of home environment.
   C. Discussion: Student-centered, teacher-directed.

   1. Q. Did you change the pumpkin patch?
      A. Yes.
   2. Q. How did you change the things you did in the record?
      clothes-washed, Ironed, Baked Bread, Mend Clothes, Sweep floor, etc.
   3. Q. How does your mother and father change the land around your home?
   4. Q. What ways does man change our city?

(CONTINUED)

Outside or Community:

I. Social Studies
   A. Possible correlation with classroom teacher's social studies unit. Ex. Students' relationship to room, home, neighborhood, and city environment.

SUGGESTED RESOURCES

Publications:

Appleton Elementary Phy. Ed. Department
Primary Grades Handbook

Audio–Visual:

Mulberry Bush
Victor 20806 (record)

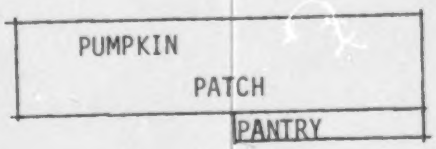
Community:

CONTINUED OR ADDED LEARNING ACTIVITIES

CLASSROOM (Continued)

D. PICK THE PUMPKIN PATCH

Equipment: 4 7" playballs or rhythm balls. Designate the playing space. Four children are selected to be the Pumpkin Pickers. They put on a red pinnie, take a ball, and go stand in the center of the playing area. The other children are pumpkins and scatter about the space. On the signal "Pick the Pumpkin Patch," the pickers chase after the pumpkins, throwing their balls at them in an attempt to eliminate them from the game by hitting them below the head. The pumpkins may dodge anywhere within the designated boundaries. If they are hit, they go sit down in the pantry (where they will be made into pie). They are eliminated from the game. After a designated time, 3-4 min., the Pickers count the number of pumpkins they have picked (hit). They choose a pumpkin still in the patch to take their place. Those pumpkins who were eliminated may now re-enter the game. See which group of pickers can pick the most pumpkins.



E. SUGGESTIONS:

1. Make the pumpkin patch very large, so the children get a good run. This is a good game for a cooler day out of doors as most of the children are active for the greater share of the playing period.

2. When choosing children to be the first pickers, try to select those who are not chosen often by the other children. You might want the girls to choose girls to take their places and boys to choose boys. In this way, the throwers will be divided between boys and girls.

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental:

Integrated with:

CONCEPT NO. 9 - Management

SUBJECT Art, Physical Education and Music

ORIENTATION Man Affects Nature

TOPIC/UNIT Singing Games

BEHAVIORAL OBJECTIVES

Cognitive:

Explain why some things or situations are considered beautiful while others are considered ugly by the general public (not artists).

Affective:

Sing and rhythmically dramatize expressions of joy toward beauty in nature alternately with expressions of disgust at man's carelessness and abuse of it.

Clean up litter which they see around them on the school ground.

Skills Used:

1. Basic steps and rhythmic movements to be used in creative dance and group dancing.

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

I. Physical Education
   A. Direct the children to form a circle and join hands for a special game.
   B. Teach them the chorus of the song: Rig-a-Jig, to the tune of Buffalo Gals.
   C. Have the children skip around in a circle while you sing the words:
   A rig-a-jig, jig, and away we go, away we go, away we go,
   A Rig-a-jig and away we go,
   Hi ho, Hi ho, Hi ho.
   D. Ask the children to show by their actions, how they feel about each thing you sing about.
   E. Teacher sing the verses while the children dramatize. Verses on back.
   F. Verses for song, "Rig-A-Jig"
      1. As I went walking down the street, down the street, down the street, A beautiful flower I did see - hi-ho, hi-ho, hi-ho.
      2. As I went walking down the street...An ugly old tin can I did see - hi-ho hi-ho, hi-ho.

Outside or Community:

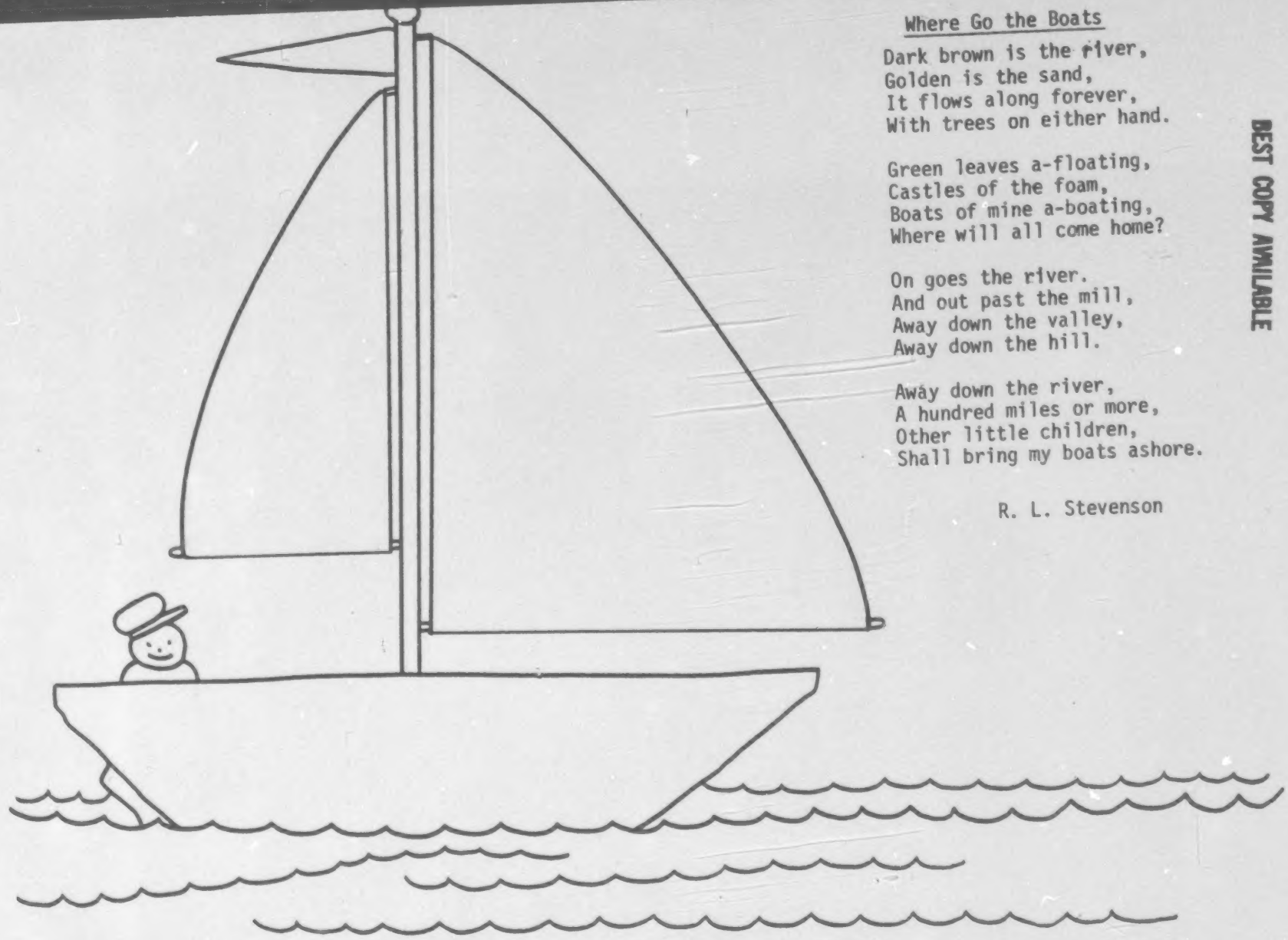
I. Art

   A. Have a "paper-pick up party" on the school grounds. The children could decorate large paper bags with signs like:
      a. Let's keep our yard clean.
      b. Down with litterbugs.

   It may be good to do it at recess when other children are around to see the demonstration so a few may get the message.

(CONTINUED)

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: Curriculum for Elementary Physical Education, Nicks, Mel, Diocesan Dept. of Education, Green Bay, Wis. 1965 **Audio–Visual:** **Community:**	CLASSROOM (Continued) F. 3. As I went walking...A pretty green fir tree I did see, Hi-ho, hi-ho, hi-ho. 4. As I went walking...An ugly old tree stump I did see...hi-ho, hi-ho, hi-ho. 5. As I went walking....Some clean sparkling water I did see...hi-ho, hi-ho, hi-ho. 6. As I went walking....A polluted river I did see.... hi-ho, hi-ho, hi-ho.



Where Go the Boats

Dark brown is the river,
Golden is the sand,
It flows along forever,
With trees on either hand.

Green leaves a-floating,
Castles of the foam,
Boats of mine a-boating,
Where will all come home?

On goes the river.
And out past the mill,
Away down the valley,
Away down the hill.

Away down the river,
A hundred miles or more,
Other little children,
Shall bring my boats ashore.

R. L. Stevenson

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E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental:

Integrated with:

CONCEPT NO. 10 - Economic Planning

SUBJECT Social Studies and Language Arts

ORIENTATION LAND USE

TOPIC/UNIT Folktale Dramatization

BEHAVIORAL OBJECTIVES

Cognitive:

Indicate the long term result of careless planning in the use of forest land through creative dramatics.

Affective:

Argue that there are many conditions to consider when man tampers with the environment instead of just one or two such as litter or use of water.

Skills Used:

1. Constructing
2. Dramatization
3. Making cartoons
4. Listing
5. Making a bulletin board
6. Audio skills

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

I. Social Studies

A. "Pick a Pretty Flower" bulletin board to show how many things can soon be destroyed. First admire the flowers. Then tell each child to go and pick one. Soon there's a few left. This same thing happens when things of nature are destroyed.

B. Diorama: Set up a forest of big and little trees. Use a child's toy payloader to uproot the trees to build several houses in their place. Houses may be shoebox homes. People come to live there but there are no trees. If a little foresight is used, a few select trees should have been preserved. Now it will take years to grow a tree of any size.

C. Tie in environmental loss resulting from short-term gains.

(Continued)

Outside or Community:

I. Social Studies

A. Have agriculture teacher or farmer visit to tell how he rotates his crops. Also, why he fertilizes and sprays some crops. What machinery is used to do these jobs?

B. Visit highway under construction and watch man's machine. How will the highway help the community? How will it change the environment?

a. less homes for people and animals.

C. School nurse or dentist can discuss how short-term gains (not brushing teeth, eating candy) can result in long-term losses. (cavities).

SUGGESTED RESOURCES

Publications:

Books:
The Little House, Virginia Lee Bates, Houghton, Mifflin, 1970
Miguel's Mountain, Bill Binzen, Coward-McCann
Why the Bear Lost His Beautiful Tail

Audio-Visual:

Community:

Farmer
Agriculture teacher
Highway construction

CONTINUED OR ADDED LEARNING ACTIVITIES

CLASSROOM (Continued)

I. C.
1. Campfires and cigarettes, (forest fires).
2. Economic gains of industry, (pollution of air and water).
3. Lack of crop rotation, (depleted soil).
4. Economic gains in wood industry, (disappearing forests).

II. Language Arts
A. Read, Why the Bear Lost His Beautiful Tail to the Children.
1. In a discussion, point out the fact that the bear wanted to get something quickly and did it in a foolish way suffering a loss which could not be replaced.
2. Have the children tell what the bear could have done which would have been more sensible. (It should have been planned.)
3. The children can make puppets and act out the folktale.

B. View filmstrip or read book on one of the following:
Grasshopper and the Ants
Frederick
Three Little Pigs
Hare and the Tortoise

Discuss how the short-term gains result in long-term losses.

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental:

Integrated with:

CONCEPT NO. 10 - Economic Planning

SUBJECT Social Studies

ORIENTATION Quality of Life

TOPIC/UNIT Air Pollution

BEHAVIORAL OBJECTIVES

Cognitive:

Count and graph the number of pleasure motor vehicles owned by families in the classroom.

Affective:

Question the need for so many pleasure motor vehicles in the community.

Skills Used:

1. Counting
2. Discussion
3. Graphs
4. Compare

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

I. Social Studies
   - A. Discuss pollution caused by motor vehicles.
   - B. You will survey motor vehicles.
     1. From classroom members count the number of snow-mobiles, mini bikes, ATV's motor boats and go-carts.
     2. Make a picture graph of the number of vehicles owned by families of room members.
   - C. Pollution of a motor vehicle.
     1. Have an older brother or mechanic bring a motor driven vehicle to school.
     2. Have him start the motor outside.
     3. Use a white cloth placed behind the exhaust pipe to see the emission.
   - D. Discuss the pollution caused by the emission.
     1. What happens to the air?
     2. How does this loss compare to the joy gained by driving the vehicle?

Outside or Community:

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: Dirty Air, Minnesota Environmental Sciences Foundation, Inc. Project ICE RMC Dangerous Air - Kalaver - Project ICE RMC **Audio—Visual:** Film: Air All Around Us McGraw-Hill Air; What It Does Encyclopaedia Britannica City Bus Driver BAVI **Community:** Industrialist or Garage Mechanic	

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental:

Integrated with:

CONCEPT NO. 10 - Economic Planning

SUBJECT Social Studies

ORIENTATION Short-long term factors

TOPIC/UNIT Multi-Media

BEHAVIORAL OBJECTIVES

Cognitive:

Define the term limited materials. Describe the effect of limited materials on the way they are used.

a. how long available
b. Search for other materials

Affective:

Demonstrate awareness of effect of limited materials on the future availability and use by making statements such as, "If you use it up now, there won't be any for the next day".

Skills Used:

1. Students will learn how to store equipment properly.

2. Students will learn printing, painting or mosaics.

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

I. Social Studies

A. Wastefulness - student should be given materials that are to last for a certain amount of time. (Ex. a two-day project. They are given an amount of paper, paint, glue etc.). If students use all the first day, they have nothing for second day. (A project such as printing or mosaics or even painting would serve as a front for this hidden message).

Outside or Community:

I. Social Studies

A. Have students talk to parents about how materials may be over-used or wasted in their jobs. Report back to class.

B. Take a trip to spot community problems caused by using materials without "thought for the morrow".

SUGGESTED RESOURCES

Publications:

"Printing: Plant Prints" I. Geary, Instructor, p. 94 June 1971
The Diligent Destroyer (150) Laycock, George, 1970 (LA)
"Printmaking for Primary Grades" il. Arts and Activities, R. A. Daniel 70:28-9, Oct. 1971
Hand-made Slices: Whetstone for Perceptual Activity: E. Scott, Arts and Activities, p. 30-1, April 1972

(Continued)

Audio-Visual:

Community:

CONTINUED OR ADDED LEARNING ACTIVITIES

PUBLICATIONS (Continued)

Creative Photography Without Film, Richard Latta, Design, p. 28-29, Summer 1972
"Happy Way to Printmaking; Styrofoam Experiments", E. Deutsch Arts and Activities, p. 32-33, April 1970
"Plastic Prints Are Neat!" M. Saxer, Arts and Activities p. 14-16, July, 1969

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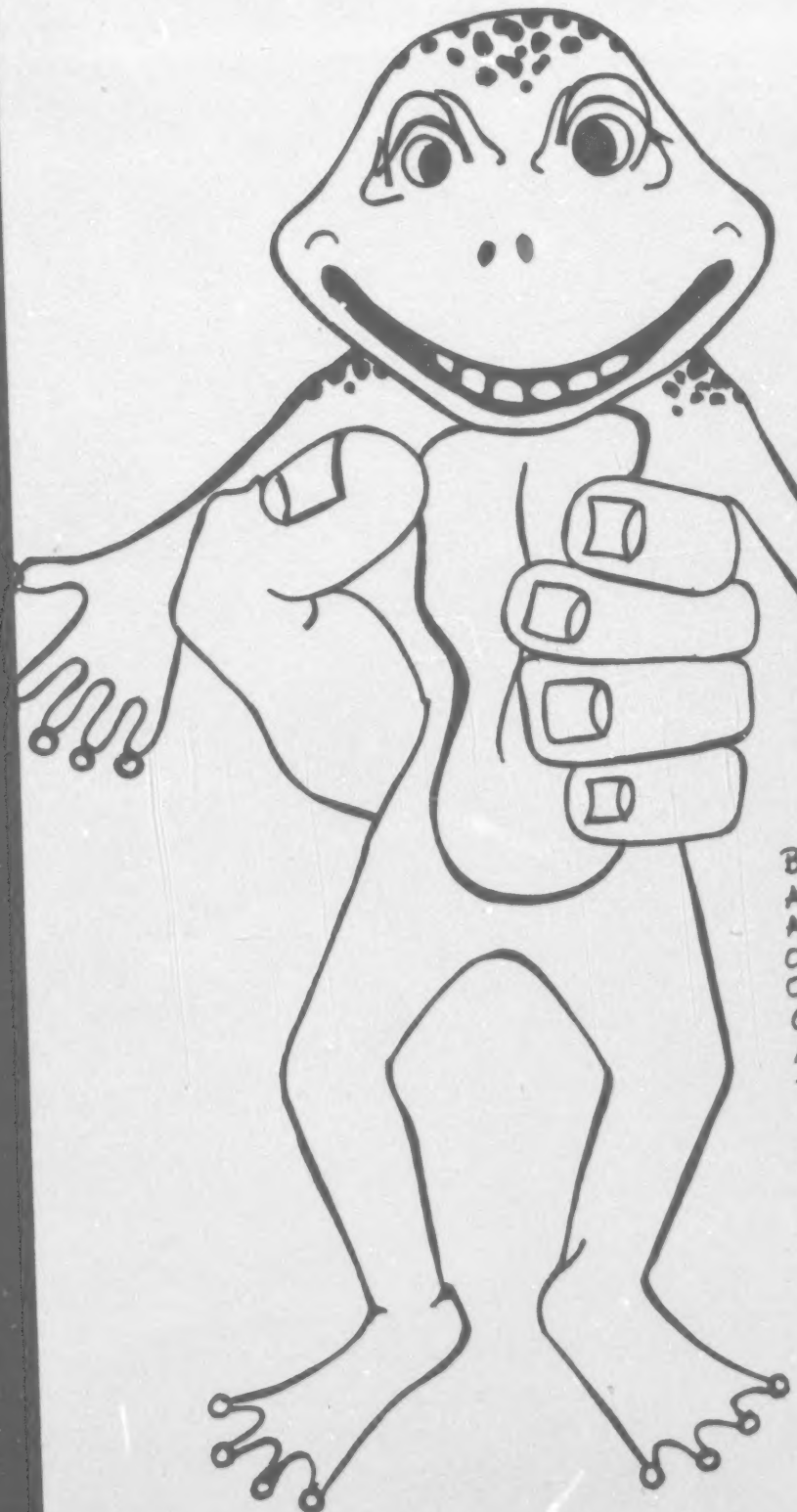


The Frog

Be kind and tender to the Frog
And do not call him names,
As "slimy-skin" or "Polliwog,"
Or likewise "Uncle James."
Or "Gape-a-grin" or "Toad-gone-wrong,"
Or "Billy Bandy-knees."
A Frog is very sensitive
To epithets like these.

No animal will more repay
A treatment kind and fair,
At least, so lonely people say
Who keeps a frog (and by the way)
They are extremely rare.

Hilaire Belloc

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental:

Integrated with:

CONCEPT NO. 11 - Individual Acts

SUBJECT Art, Social Studies and Language Arts

ORIENTATION Waste Disposal

TOPIC/UNIT Littering

BEHAVIORAL OBJECTIVES

Cognitive:

Explain the extent of the total change that occurs when large numbers of people do things that result in only a little change by themselves.

Affective:

Pick up after himself in and outside of the classroom.

Skills Used:

1. Planting
2. Murals
3. Drawing

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

I. Language Arts
A. Litterbug Game - Each child finds something in his desk that he no longer wants. Go outside or remain in classroom. One child drops his unwanted item (litter) - the change is not too bad. But then have a few more go - then everyone drop their litter. Next step: Clean up - put in trash can. (Encourage high school ag. or art class to design attractive litter containers.)

II. Art
A. Litterbug Bulletin Board. Draw outline of a huge bug. Children go on a "pick-up litter" walk. When they come back, glue litter found to "Litterbug" Bulletin Board.
B. Make individual litter bags with slogans in art class. Use them for pickup at school; then have them use them in their family car or elsewhere.

(CONTINUED)

Outside or Community:

I. Social Studies
A. Yard trip for children to see the articles that have been dropped by careless people.

B. Field trip to a park or picnic ground to arouse feelings in children about environment used by the public.

C. Drawings of the devastation that was caused at park or picnic ground. Follow activity with discussion period.

SUGGESTED RESOURCES

Publications:

Books:
Once There Was a Tree, Discovering Nature Series, Phyllis S. Busch, World Publishing
Patterns of Nature, Jeffrey Baker, Doubleday
Keep Our World Clean, song sheet available at CESA #9 Office
This Land Is Your Land, song sheet

Audio–Visual:

Films:
Garbage, CESA 9
Litterbug, color, 10 min., Avis BAVI
The Litterbug, Walt Disney, 8 min.

Community:

Forest Ranger
Janitor

CONTINUED OR ADDED LEARNING ACTIVITIES

CLASSROOM (Continued)

III. Social Studies

A. Let the child who found the most litter be "King for a Day" or "Queen for a Day".

B. Tell janitor to not empty waste baskets for one week. This will be similar to garbage pickup once a week. At the end of the week, analyze the contents of the waste baskets. Was the paper really unusable and could it have been erased rather than wasting it and taking new? Separate paper for recycling.

C. Have janitor show children what he does with the waste from the waste baskets.

D. During a week's period, the children will make a graph and put checks behind their names as to how many bags of litter they have picked up.

E. Talk about individual efforts toward the litter campaign. (weekly award).

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental:

Integrated with:

CONCEPT NO. 11 - Individual Acts

SUBJECT Social Studies, and Language Arts

ORIENTATION Taking Care of Property

TOPIC/UNIT Care of Property

BEHAVIORAL OBJECTIVES

Cognitive:

Demonstrate several ways he can take care of his property and the property of others.

Affective:

Respect his own and public property by keeping books and desks clean, and without carvings and marks.

Skills Used:

1. Discussion
2. Demonstration

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

I. Language Arts
   A. Discuss the care of desks, books and clothes.
   B. Teacher take out comic book. Using crayon, pencil, etc. start writing on and in text.
   C. Discuss why we should take care of our desks, books and clothes.
   D. Discuss why we should take care of public grounds and property.
   E. Through dramatization, demonstrate the need for children to respect personal property and the property of others.
   Examples:
   1. A child destroying another student's art work.
   2. A student not taking care of school property (losing a game part) rendering a loss to all students.
   3. Lost puzzle parts.

Outside or Community:

I. Social Studies
   A. Have janitor talk to children about the effects of school property destruction.
   B. Talk to a law enforcement officer about the problems created by public property destruction.

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications:	
Audio–Visual:	
Community:	

E. S. E. A. Title III - PROJECT I-C-E 50-70-0135-4

Environmental:

Integrated with:

CONCEPT NO. 11 - Individual Acts

SUBJECT Art

ORIENTATION Individual Alterations

TOPIC/UNIT Fire Prevention

BEHAVIORAL OBJECTIVES

Cognitive:

Explain that a single cause can be responsible for the destruction or upbuilding of an environment.

Affective:

Accepts the responsibility of individual working together to develop the whole by participating in the making of a mural or some other group activity.

Skills Used:

1. Construction
2. Observation
3. Discussion
4. Group planning and cooperation.

STUDENT-CENTERED LEARNING ACTIVITIES

In Class:

I. Art

A. Murals: Forest Fires.
1. Draw what someone did that started the fire: matches, campfires left unattended, cigarettes.
2. Draw trees burning and wildlife fleeing from their forest homes.
3. Results of the fire: blackened stumps and wildlife desperate to find a new home.

B. Read about "Smokey the Bear". Let children draw his picture or write a short story.

C. Stress that wild flowers in the area should be enjoyed and not picked. Bulletin Board, "Wild Flowers". (Hayes Pub.) Learn to recognize.

Outside or Community:

I. Social Studies

A. Arbor Day - Have a tree planting ceremony at your school. Choose a protective, attractive area where it will add to the school's beauty. Give each child a seedling to plant at home. Tree will grow up with the child.

B. Have a forest ranger speak about fire safety.

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: Smokey the Bear, Story and song **Audio-Visual:** Forests, color, 10 min., Gateway. BAVI Your Friend the Forest, Save It or Destroy It, color, 6 min. EBF BAVI Kit: Forest Fire Prevention and Conservation Kit Smokey the Bear, 5 min., USDA **Community:**	

E. S. E. A. Title III – PROJECT I-C-E 69-70-0135-4

Environmental:

Integrated with:

CONCEPT NO. 11 - Individual Acts

SUBJECT Music, Physical Education and Soc. Studies

ORIENTATION Cleanup

TOPIC/UNIT Rhythmical Activities

BEHAVIORAL OBJECTIVES

Cognitive:

List at least five ways to beautify the land around them.

Affective:

Brag about doing his share in keeping the land clean and litter-free, and give example of what he did.

Skills Used:

1. Rhythmic movements corresponding to the listed activities.

STUDENT-CENTERED LEARNING ACTIVITIES

In Class:

I. Music & Physical Education
   A. To tune of the Mulberry Bush, Chorus:
   Here we go round a beautiful tree,
   a beautiful tree,
   a beautiful tree,
   Here we go round a beautiful tree,
   So early in the morning.
   This is the way we:

   1. pick up twigs (3x)
   2. rake the lawn (3x)
   3. cut the grass (3x)
   4. water the plants (3x)
   5. trim the hedge (3x)
   ...so early in the morn

   Discussion:
   Cleaning up can be fun as well as profitable.

Outside or Community:

I. Social Studies
   A. Have a school yard cleanup.
   B. Clean up an entire block.
   C. Clean up a nearby park area.

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: Nicks, Mel, Curriculum for Elementary Physical Education, Diocesan Dept. of Education Green Bay, Wis. 1965 **Audio-Visual:** **Community:**	

E. S. E. A. Title III – PROJECT I-C-6 69-70-0136-4

Environmental: Integrated with:

CONCEPT NO. II - Individual Acts SUBJECT Math, Soc. Studies and Language Arts

ORIENTATION Solid Waste Disposal TOPIC/UNIT Recycling

BEHAVIORAL OBJECTIVES	STUDENT-CENTERED LEARNING ACTIVITIES	
	In-Class:	Outside or Community:
Cognitive: Measure the bottles and cans from his family and compare this garbage to the amount for the total class.	I. Social Studies A. Have the students select a day on which they will ask their mothers to save the cans and bottles she empties that day. 1. These are brought to school. 2. Count the number of bottles, count the number of cans. II. Math A. How much do these cans weigh? 1. Measure one person's cans and bottles. 2. Measure the entire group's cans and bottles. 3. Compare these. B. How long is a line of the cans? 1. Line up and measure individual cans. 2. Line up the entire group's cans and bottles and measure. 3. Compare. C. Project this into city garbage collection. Problems?	I. Language Arts A. City worker to discuss his job with Sanitation Department. B. Law enforcement officer to discuss the laws against littering refuse disposal.
Affective: Demonstrate that his help is needed to cut down the pile-up of refuse by picking up litter along his path to school.		
Skills Used: 1. Discussion 2. Counting 3. Comparing 4. Survey taking 5. Cause and effect thinking		

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: Trash Is Taking Over. Minnesota Environmental Sciences Foundation: at ICE RMC **Audio-Visual:** **Community:** Sanitary Engineer to discuss refuse picked up a few years ago as opposed to now. Stress quantity and how disposal of refuse has changed.	

E. S. E. A. Title III – PROJECT I-C-6 69-70-0125-4

Environmental:

CONCEPT NO. II - Individual Acts

ORIENTATION Recycling

Integrated with:

SUBJECT Music

TOPIC/UNIT Recycling

BEHAVIORAL OBJECTIVES	STUDENT-CENTERED LEARNING ACTIVITIES	
	In Class:	Outside or Community:
Cognitive: Construct a playable instrument from materials which have been reclaimed.	I. Music A. Teacher, student interaction of what kind of musical instruments can be made from discarded materials. 1. Drums from coffee cans 2. Rattles from salt boxes 3. Chimes from glass bottles 4. Shakers from bottle caps B. How would you go about constructing these instruments? C. Students bring in materials. D. Students construct instrument. E. Discuss how other materials can be recycled in other areas. F. Students could make up their own music for their instruments.	
Affective: Assist in finding ways for re-using materials such as are found in a normal home.		
Skills Used: 1. Following step by step directions. 2. Instrument construction		

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: Making and Playing Classroom Instruments, Marcelle Vernazza $1.50 Fearon Publishers, Inc. 2165 Park Boulevard Palo Alto, Calif. 94306 Music Inst. for Children to Make, John Hawkinson **Audio-Visual:** Ecology Folk Songs, Grades 4-H.S. Album K 9000 - 1 - 12" 33 1/3 rpm Record, guide (cassette, $6.95) Honor Your Partner Albums, Rope Skipping, Ball Bouncing Vocational Activities, Inc. Freeport, New York **Community:**	

E. S. E. A. Title III - PROJECT I-C-E 69-70-6136-4

Environmental: **Integrated with:**

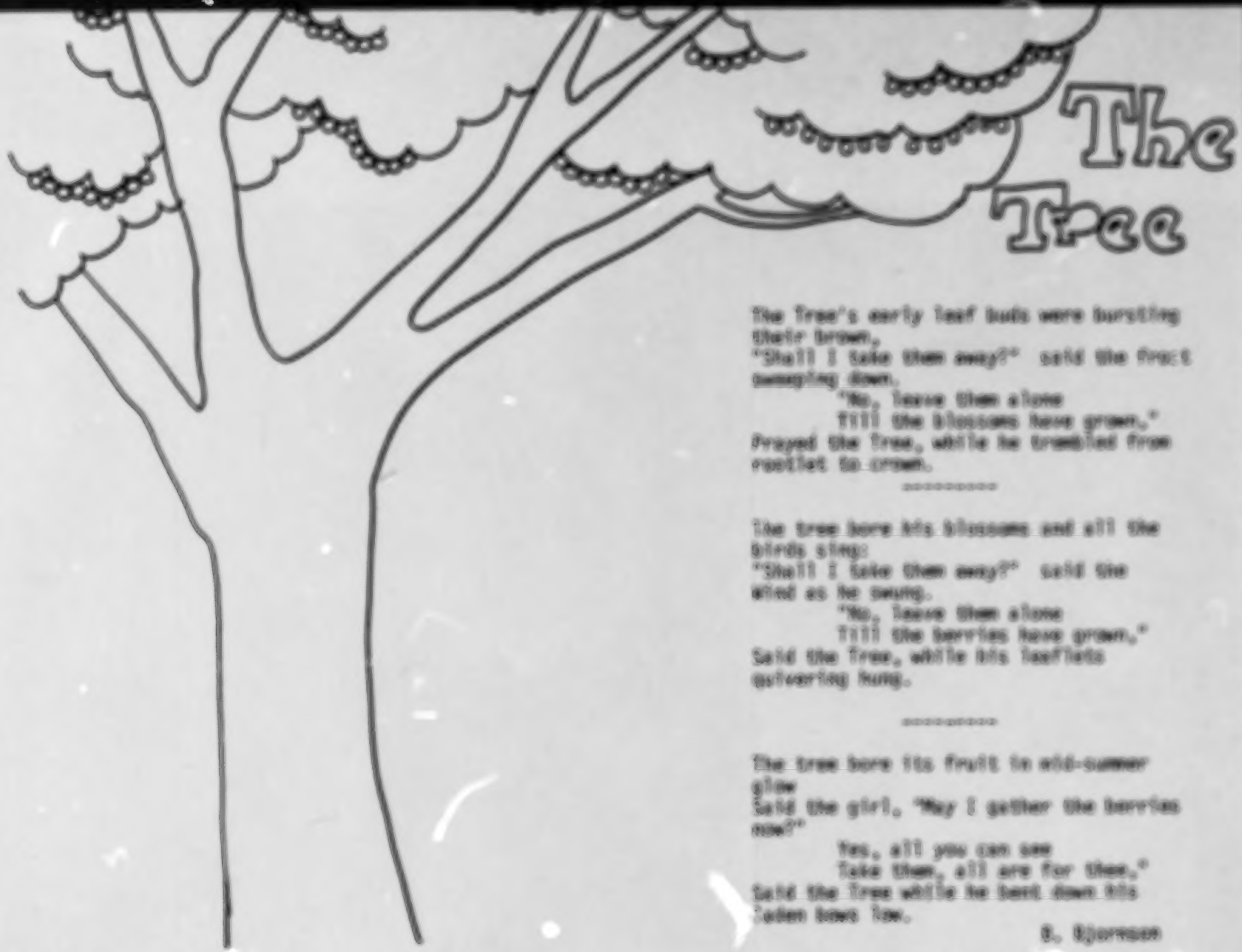
CONCEPT NO. II - Individual Acts **SUBJECT** Physical Education

ORIENTATION Safety and Conservation **TOPIC/UNIT** Dramatic Play

BEHAVIORAL OBJECTIVES	STUDENT-CENTERED LEARNING ACTIVITIES	
	In-Class:	Outside or Community:
Cognitive: Demonstrate in an imaginary hiking experience, safety and conservation as they mimic hiking movements.	I. Language Arts A. Stressing safety and conservation, the teacher can lead the children to imagine themselves going on a hike to enjoy nature. Then she can direct them in this problem: 1. Let's pretend that we are going on a hike. What are some things we need to take with us? 2. Now that we have gathered all our materials, let's roll our packs into a nice neat bundle in this manner: a. Put down your tarp b. Arrange your blankets c. Put the rest of your things in. d. Roll the pack and tie it up. 3. Off we go...(Imitate walking through the woods, each child in his own way, over a rock, jump a creek, etc.) 4. Time to rest - be careful where you sit. 5. Let's go again (watch your step).	I. Social Studies A. Have a boy scout or scout master speak on safety in the woods. 1. Safety for the camper or hiker. 2. Safety for the natural environment - how to preserve it and respect for private property. B. Have the children bring articles they would take with them on a hike, and demonstrate how to pack them and use them properly.
Affective: Investigate new sources of safety precautions necessary for outdoor living and conservation of natural resources.		
Skills Used: 1. Outdoor living 2. Locomotor skills 3. Creative dramatics		

(Continued)

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: Dauer, Victor, Fitness for Elementary School Children Through Physical Education, Burgess Pub. Co., 1962, p. 105 Webelos Scout Book, Boy Scouts of America **Audio-Visual:** **Community:**	CLASSROOM (Continued) I. 6. Make blazes so we can find our way back. 7. Pick a good spot for the tent and put the tent up. 8. Let's go find some firewood for a campfire. 9. Clear out a spot for the fire, carry stones to put around it, light the fire, cook your supper on it. 10. Eat your supper, be careful how you dispose of wastes, so wild animals don't come too close. 11. Watch where you walk, be careful not to step on small plants. Etc.



The Tree

The tree's early leaf buds were bursting their brown,
"Shall I take them away?" said the frost swooping down.
"No, leave them alone
Till the blossoms have grown,"
Prayed the tree, while he trembled from rootlet to crown.

The tree bore his blossoms and all the birds sing:
"Shall I take them away?" said the wind as he swung.
"No, leave them alone
Till the berries have grown,"
Said the tree, while his leaflets quivering hung.

The tree bore his fruit in mid-summer glow
Said the girl, "May I gather the berries now?"
Yes, all you can see
Take them, all are for thee,"
Said the tree while he bent down his golden bows low.

B. Bjornson

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E. S. E. A. Title III – PROJECT I-C-E 99-70-0135-4

Environmental:

Integrated with:

CONCEPT NO. 12 - Stewardship

SUBJECT Social Studies and Language Arts

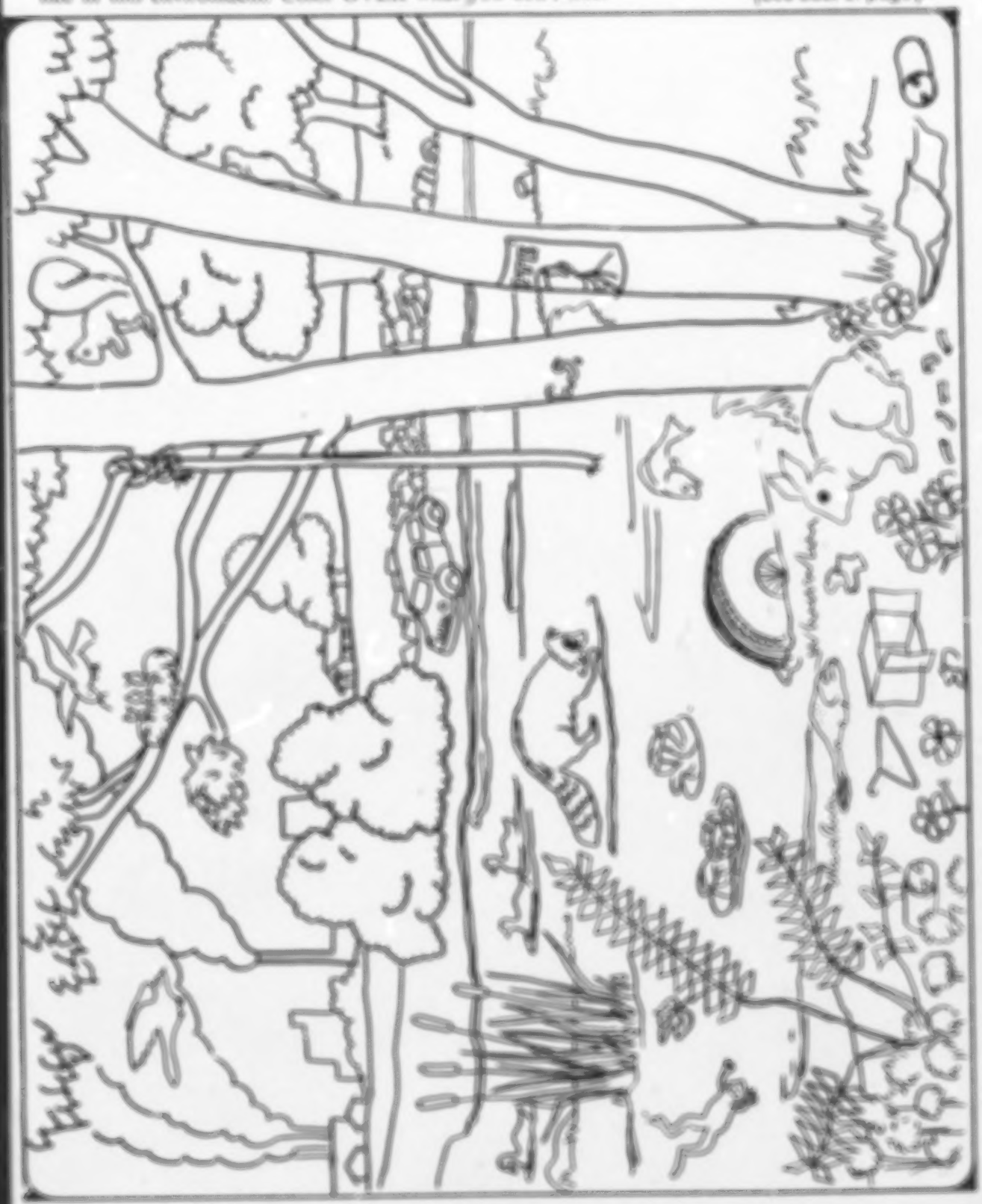
ORIENTATION Rights of Others

TOPIC/UNIT Rights of Others

BEHAVIORAL OBJECTIVES	STUDENT-CENTERED LEARNING ACTIVITIES	
	In Class:	Outside or Community:
Cognitive: Demonstrate that in showing respect for the rights of others, his rights will also be respected.	I. Language Arts A. Discuss reasons for a sidewalk. If everyone walks on grass, grass will die, and a path will be worn. B. Show how noise in the classroom disrupts the class through dramatization: 1. loud music or talking 2. interruptions 3. noisy feet C. How do you feel about stepping on an ant hill? How do you feel about animals you see in cages? How do you feel about people picking flowers in the park? D. Color picture on next page to show the kind of world you would like to live in.	I. Social Studies A. Take a walk to look for "eyesores". Look at junk yard so displeasing to the eye. What can be done? (Dismantle and recycle glass and metal). A junk yard is not really pollution but is displeasing to the eye, thus the owner should screen it from view by a tall fence; use trees as a visual shield. B. Show factory smoke stacks polluting air and dumping waste products into water. Results: dirty air making it difficult to breathe, discolored water, plants and fish die, algae on top of water, nobody can swim or fish or boat in it. Beauty is destroyed). C. Litterbugging makes picnic area, home school, etc., look displeasing to the eye. Conduct litterbug cleanup walks.
Affective: Demonstrate his regard to the rights of others in the classroom by being quiet while others are trying to study, not interrupting those trying to study unless very important, etc.		
Skills Used: 1. Observation 2. Appreciation 3. Listening		

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications:	
Audio-Visual: No Time To Waste, Kit 'O, p. 9 ICE Our Environment 2 Kit 30 (Filmstrips and records ICE) 1. Sourd and Noise 2. Quiet, Please 3. Noise and You Our Environment 3 Kit 31 (Filmstrips and records ICE) 1. It's Really Up to Us 2. What is the Problem?	
Community:	

COLOR—CLEAN this **ENVIRONMENT** *and give it to your teacher.* Color **IN** what you like in this environment. Color **OVER** what you don't like. *(See back of page.)*



E. S. E. A. Title III - PROJECT I-C-6 OE-70-0130-4

Environmental:

Integrated with:

CONCEPT NO. 12 - Stewardship

SUBJECT Social Studies

ORIENTATION Public Property

TOPIC/UNIT Care of Books

BEHAVIORAL OBJECTIVES

Cognitive:

Demonstrate either how books should or should not be taken care of. List property in the room and outside which students should care for.

Affective:

Suggest better ways for students to care for school property.

Skills Used:

1. Dramatization
2. Courtesy

STUDENT-CENTERED LEARNING ACTIVITIES

In-Class:

I. Social Studies
   A. Show filmstrip, How to Take Care of Books.
   B. Have children dramatize the correct or incorrect way to handle books.
   C. Discuss why school books should be cared for.
   D. From discussion in number four, list other school property which should be cared for; children may want to tell how to care for each article listed.
   E. Discuss how our taking care of property now will help our future. (Include with this that if we mar our books, will the first graders coming next year enjoy reading as much as we have?)

Outside or Community:

I. Social Studies
   A. Ask librarian to talk to class about correct use of books.
   B. Have custodian talk to children about the importance of taking care of school property.

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications:	
Audio-Visual:	
How to Take Care of Books. Filmstrip Paper Makes Wis. Great. 3319 FS St 4 ICE Paper and Pulp Making. BAVI $2.25 Paper. BAVI $2.00	
Community:	